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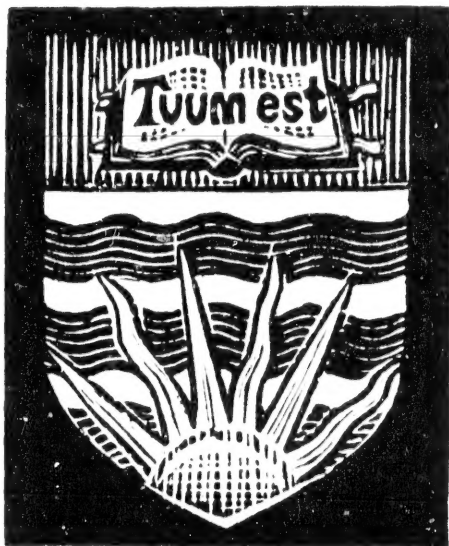
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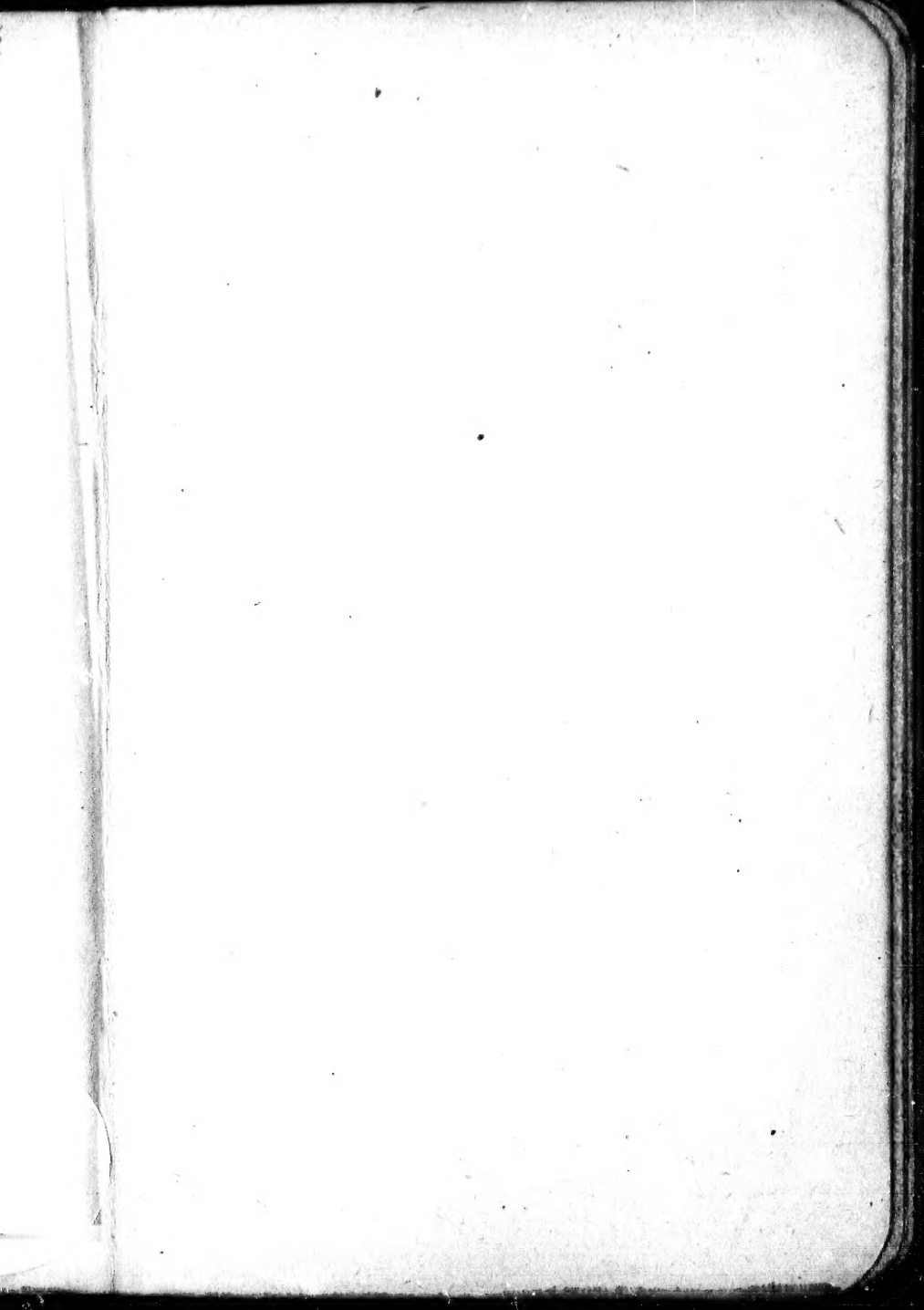
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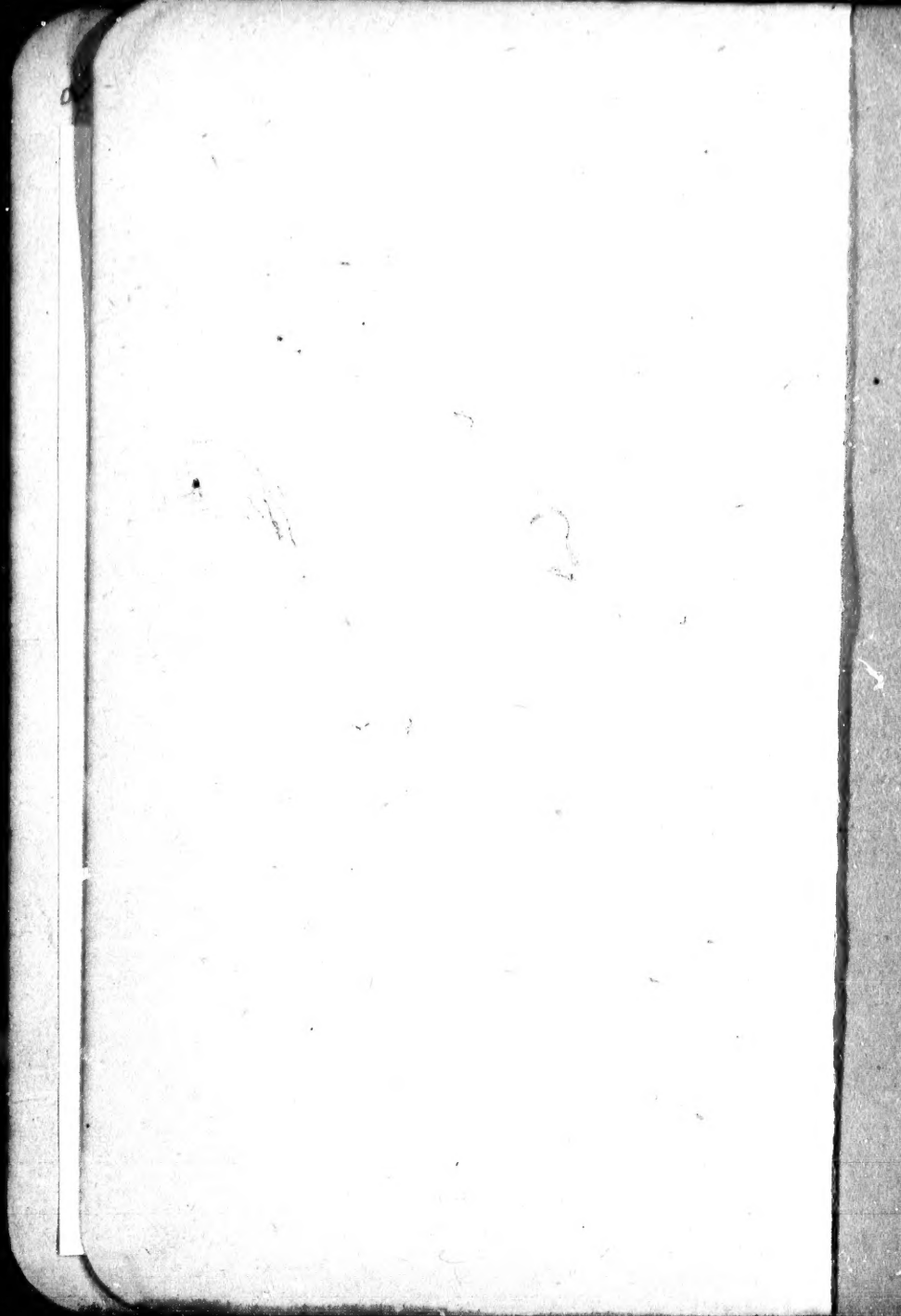
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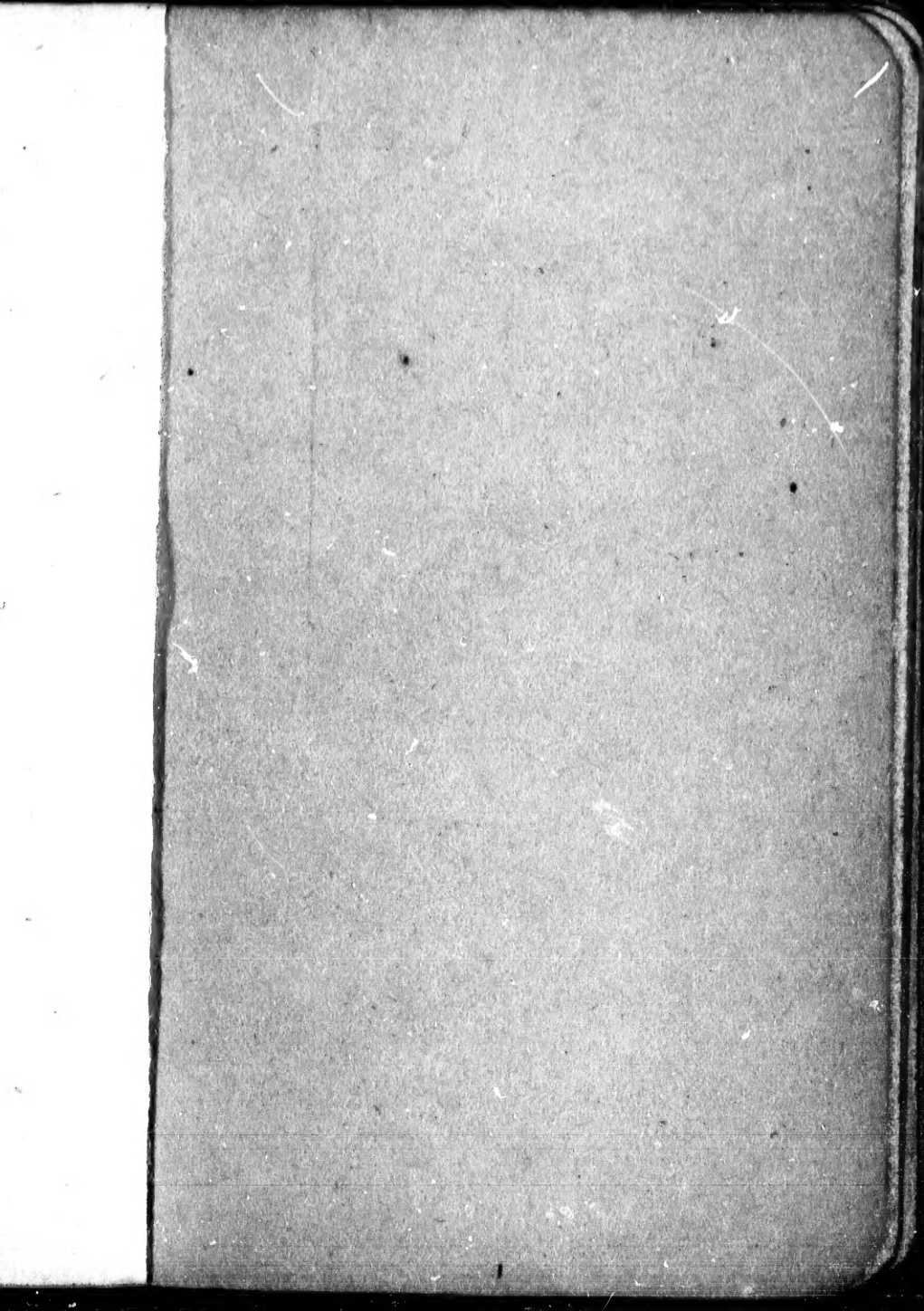
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Sailing and sledging on the ice.

Frontis.

OF
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From Official Documents

THE LITTLE KLONDYKE NUGGET

STORY OF THE DISCOVERY

OFFICIAL REPORTS—WHO OUGHT TO GO—MEDICAL
ADVICE—HOW TO AVOID MANY HARDSHIPS—
BEST OUTFIT—SHORTEST ROUTES—PRE-
CIOUS ITEMS ABOUT MINING USEFUL
TO ALL—CANADIAN CUSTOMS DU-
TIES—MAPS AND ILLUSTRATIONS—CALENDAR—DE-
PARTMENT FOR EXPENSE
ACCOUNT, RECEIPTS,
MEMORANDA—
ETC., ETC.

U.S. and Canada Mining Laws in Full

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LAIRD & LEE, PUBLISHERS

1897

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TO THE KLONDYKE.

To describe the new El Dorado in detail in this little book would be an impossible task. Our aim has been to avoid all superfluous matter and to give, in condensed form, only such practical information as is really needed by the fortune seeker.

Good, reliable Maps of shortest routes to the Gold Fields; an exhaustive List of Necessaries, to be included in a perfect Outfit; the cost of Transportation from the Pacific coast to the Mines; a Table of the Duties exacted by the Dominion Customs on all Supplies imported; the Canadian and American Mining Rules and Regulations. Health and Climate, Mining Processes, and Gold Production of the World, besides many other facts of general interest are all included in this Handy Companion, which will occupy no space to speak of in the prospector's pack, and yet be complete and accurate in every respect.

THE PUBLISHERS.

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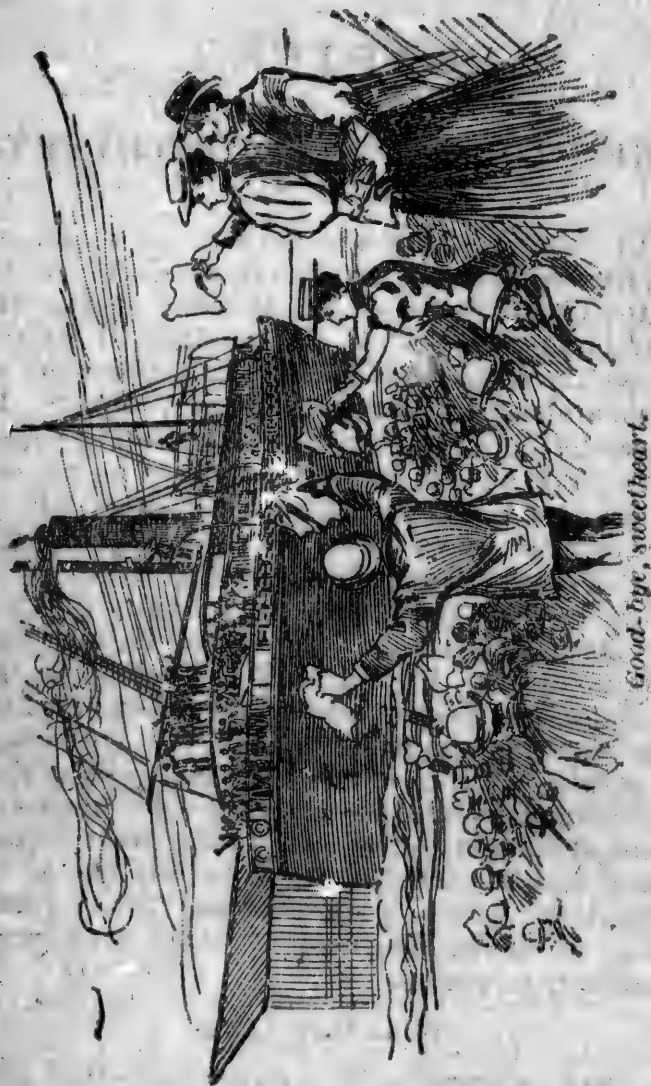
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MAP OF ALL LEADING ROUTES.

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CHAPTER I.

THE STORY OF THE DISCOVERY.

In June, 1867, by the payment of a sum of \$7,200,000, Russian America became a Territory of the United States under the name of ALASKA. The name "Alaska" is a corruption of Al-ay-ek-sa, the name given by the native islanders to the mainland, and signifies "great country." It contains about 577,390 square miles of territory, or is nearly one-fifth as large as all the other States and Territories combined. It is larger than twelve States the size of New York.

For years it has been known that gold existed there in large quantities, to be obtained either by placer mining or by quartz crushing. A large company, the Alaska-Treadwell, on Douglas Island, opposite Juneau, has been working the latter process with undiminished success.

More recently, facts have come to light that give complete evidence of enormous deposits of gold along the upper part of the great Yukon River and its tributaries, especially the River Klondyke, called by the Indians Thron-Dluck (river of big fish), the name of which has become suddenly so popular.

Boundary Line.

These streams all flow down from that portion of the Rocky Mountains that rises in the Northwest Territory of Canada. The present

discoveries which have caused so much excitement are located so close to the 141st degree of west longitude—which forms there the official boundary between the American and British possessions—that it is believed by many that Dawson City—the new mining camp—and the region around it belong, by rights, to Uncle Sam.

Professor George Davidson, for many years at the head of the U. S. Government Geodetic Survey on the Pacific coast, has made the following statement based upon his own investigations:

“Whatever doubt has been cast upon the position of the whole Klondyke district being in British Columbia must have arisen from a misunderstanding of the dispute existing upon the proper location of that part of the boundary line lying eastward and southward of Mount St. Elias. The north or meridian line of the boundary has been accurately determined. The latest information places the independent determinations of this meridian made by the two governments at the boundary line within the width of an average sidewalk. The only local dispute that could possibly arise would be in the Forty-Mile Creek district, because the boundary line crosses sharp, steep mountain ridges of 2,500 and 3,000 feet elevation, and inferior instrumental means might cause a slight doubt as to the direction in some instances. However, no dispute has arisen in the district, nor is it likely that any will occur. There is no doubt that the line has been satisfactorily laid down.”

We may, therefore, accept as fixed the fact of the British ownership of the Klondyke region; but must add that there is not a doubt in the

mind of any mining expert that the precious metal is to be found at an early date on Alaskan soil, in much larger quantities than discovered until now.

U. S. Government Report.

The report on the Yukon gold region by J. E. Spurr, the geological expert, who headed a party that made a thorough investigation in Alaska in the summer of 1896, giving new facts about the interior, was made public Aug. 10, 1896. It said as to the Forty Mile gold district, that in the latter part of 1887 Franklin Gulch was struck and the first year the creek is estimated to have produced \$4,000. Ever since it has been a constant payer. The character of the gold there is nuggety, masses of \$5 weight being very common. The yield of the first year after the discovery of Forty Mile has been variously estimated at from \$75,000 to \$150,000, but \$60,000 probably covers the production.

The discovery of Davis Creek and a stampede from Franklin Gulch followed in the spring of 1888. In 1891 gold mining in the interior as well as on the coast, at Silver Bow Basin and Treadwell, received a great impetus. The event of 1892 was the discovery of Miller Creek. In the spring of 1893 many new claims were staked and it is estimated that eighty men took out \$100,000. Since then Miller Creek has been the heaviest producer of the Forty Mile district, and until recently of the whole Yukon. Its entire length lies in British possessions. The output for 1893, as given by the mint director, for the Alaskan creeks, all but Miller Creek being in American possessions, was \$198,000, with a mining population of 196.

The total amount produced by the Yukon placers in 1895 was double that of the previous year. In 1896 the output had doubled again.

Forty Mile district in the summer of 1896 is described in the report as looking as if it had seen its best days, and unless several new creeks are discovered it will lose its old position.

The Birch Creek district was last summer in a flourishing condition. Most of the gulches were then running, miners were working on double shifts, night and day, and many large profits were reported. On Mastodon Creek, the best producer, over thirty miners were at work, many expecting to winter in the gulch. As to hydraulicking, the report says: "Some miners have planned to work this and other good ground supposed to exist under the deep covering of moss and gravel in the wide valley of the Mammoth and Crooked Creeks by hydraulicking, the water to be obtained by tapping Miller and Mastodon Creeks near the head. It will be several years before the scheme can be operated, because both of the present gulches are paying well and will continue to do so at least five years."

Following is the report on the Klondyke district:

"With the announcement of gold here in the winter of 1896-97, there was a genuine stampede to the new region. Forty Mile was almost deserted. But 350 men spent the winter on the Klondyke, in gulches, and at the new town of Dawson. The more important parts of the district are on Bonanza and El Dorado Creeks. According to the latest information 400 claims had been located up to January 1, 1897; about

half as many on El Dorado Creek. There is plenty of room for many more prospectors and miners, for the gulches and creeks which have shown good prospects are spread over an area of 700 square miles."

The estimated Alaskan gold production for 1896, made by the Spurr report, is \$1,400,000; it is expected to reach \$7,000,000 in 1897, and probably \$15,000,000 or more in 1898.

Where the Gold Comes From.

In another official report, General Duffield, Superintendent of the U. S. Coast and Geodetic Survey, speaking of the origin of all this placer gold, said:

"The gold has been ground out of the quartz by the pressure of the glaciers, which lie and move along the courses of the streams, exerting a tremendous pressure. This force is present to a more appreciable extent in Alaska than elsewhere, and I believe that, as a consequence, more placer gold will be found in that region than in any other part of the world." He added that the gold hunters on the American side of the line have made the mistake of prospecting the large streams instead of the small ones. "When gold is precipitated," he said, "it sinks. It does not float far down stream. It is, therefore, to be looked for along the small creeks and about the headwaters of the larger tributaries of the Yukon. There is," he added, "no reason why as rich finds may not be made on the American side of the line as in the Klondyke district."

Finally, as a result of a conference between the Secretary of the Treasury and the Director of the United States Mint, it was decided to send

a mining expert into the Klondyke country next spring to make an estimate as to the probable amount of gold in this region.

In reaching this conclusion the Treasury Department followed the precedent established in the case of the gold discoveries in the Rand, South Africa. When those discoveries were reported, the Rothschilds sent Hamilton Smith, of New York, to estimate the value of the fields, and he reported \$3,000,000,000 as his estimate.

Mining experts doubted the correctness of Mr. Smith's conclusions on account of the smallness of the space occupied by the mines, and the German government sent Bergath Schmeiser, a noted mining engineer, to make a report. The government of the United States followed Germany's example by sending George F. Becker. Both Schmeiser and Becker agreed with the statement of Mr. Smith, and developments have shown that all three were right.

McCormack, the Discoverer

The Klondyke region was prospected in 1896-97, and some gold taken from it, causing a mild excitement in the immediate vicinity. An Illinois man named George McCormack married a squaw and settled in the country in 1887; his wife's relatives revealed him the secret—generally so well kept by the Indians—of large deposits of gold, and in 1896 he located a rich placer on Bonanza Creek, flowing into the Klondyke stream, and with primitive appliances washed out \$1,200 worth of gold in a few days.

The next productive creek was discovered and named El Dorado by two other Americans—F. W. Cobb, of Massachusetts, and Frank Phis-

cator, the latter from Michigan. They were totally inexperienced in the mining business, and are now worth millions.

These great finds, followed by many similar ones during the summer of 1896 and the spring of 1897, started a stampede from all the neighboring camps—Circle City, Forty Mile, etc.

Dawson City and its Founder.

The city of Dawson was patented and platted in September, 1896, by Mr. Joseph Ladue, and had soon a population of 3,500 souls, increasing now at the rate of several thousand a month. Its founder and first mayor was born in Schuyler Falls, N. Y., where he worked as a farm hand until 1882. Then he went prospecting for gold in the Black Hills, made money, and lost it in speculation. He drifted to Alaska and ran a saw-mill and general store at Sixty Mile. He made money selling lumber at \$100 a thousand feet, although he had to pay \$12 and \$15 a day for help. He is now in New York and has capitalized his Klondyke holdings—mines and city lots—for \$5,000,000, prominent business men from Canada and the United States constituting his board of directors.

The "Tenderfoot's" Country.

- Another group of four men—all "tenderfeet" or "chacoos," as they are called by the Indians, the Stanleys (father and son) and the brothers Warden—started from Seattle, where they had suffered from the hard times, and reached Dyea in April, 1896. They crossed the Chilkoot Pass, carrying their own pack, and after many perils

encountered and sufferings endured, located four claims on the El Dorado Creek. From two of these claims they took \$112,000 in 1896 and the spring of 1897, and their holdings are estimated to be worth *two millions*. Some of their pans yielded as high as \$200 per pan.

Sometimes miners refuse pay for their work, but will accept work on shares, their interest



Sluicing for Gold.

in the gold panned that day to be settled every night. It is not rare to see such "lays," as they are called, produce to the interested miner as high as \$1,000 a week.

C. J. Berry's \$2,000,000 Mines.

The next in order among the brilliantly successful discoverers of creeks and gulches in the

Klondyke district is a young Californian, Mr. Clarence J. Berry. Poorly successful as the owner of a fruit ranch near Fresno, Cal., he decided to try his luck on the Yukon. He reached Juneau with only \$60 in his pocket, but began undaunted the terrible trip over the Chilkoot Pass and the series of lakes. He reached Circle City and made his living as best he could while looking around for a good location. In the fall of 1895 he returned home almost as poor, but with greater faith than ever in the future of the district. He married on the strength of these hopes, and made his wedding trip to Forty Mile. In September the news of the McCormack discoveries on Bonanza Creek struck the Forty Mile settlement, and he located a claim 18,500 feet above the first and original discovery point. He struck it "rich" at once, and was soon able to build a comfortable home for his wife in Dawson City, the new camp. He secured another claim, this time on El Dorado Creek, and grew rich at a great rate. In a few months he took out \$130,000, paying his miners \$22,000 out of the amount. During the winter he kept the men at work "burning" and throwing the gravel aside to be "panned" or "sluiced" in the summer. He paid each of them \$15 a day wages, and settled with them every evening by just washing a panful of dirt with melted snow. Whenever his wife felt like increasing her pin-money, she just went to one of the gravel heaps, took out a panful, washing its gold and keeping it. She soon had \$10,000 made that way. They came home in the summer of 1897, and Mr. Berry was offered \$2,000,000 for his holdings. It is said that he has accepted.

More Lucky Finders.

In November, 1896, Thomas Flack, William Sloan and a man by the name of Wilkinson sunk a hole eighteen feet deep in El Dorado Creek, and struck a four-foot pay streak that went \$5 to the pan, or \$2.50 to the shovelful. They shoveled out ton after ton of dirt that was literally filled with gold, and did not know it. The news of the new strike was spread out all over the Northwest, and not only prospectors but practical mining men came to the diggings. Some capitalists saw the Flack mine, and bought out his partners, Sloan and Wilkinson, for \$50,000 each, but Flack would not sell, which proved his sense, as the men who purchased his partners' interest got over \$50,000 each out of the dump that the trio had discarded before they struck the pay streak at the eighteen-foot level.

A miner by the name of Alex MacDonald took out \$94,000 from a forty-foot patch of ground only two feet thick. He employed four men to do the work and consumed but twenty-eight days. That gravel went \$250 to the pan, and was in claim No. 30, El Dorado Creek.

Different men have cleaned up from \$175,000 to \$50,000 in fine gold, and all of it was done during three months of the past winter. Out of El Dorado Creek alone came \$4,000,000, and at least \$1,000,000 from Bonanza Creek. How much more there is in it is impossible to say, but to all appearances the whole district is full of gold waiting to be taken out.

Surveying the Claims.

Just as soon as the rush began at Bonanza Creek the miners called a meeting, and in

order that the claims be relocated and made sure of, it was decided to measure them all off with a rope, and reset the stakes that defined them. Somehow or other the men selected to make the measurements slid in a forty instead of a fifty foot rope, and thus made the claims from fifty to one hundred feet short in the total. In other words, they were condensed, and the ground left out was literally grabbed. This state of affairs incensed the miners so that when they made the discovery of how the measurements were conducted, they petitioned the Dominion Land Surveyor to come up to Bonanza Creek at once and settle the complications that were arising. He resurveyed the whole group of claims and the matter was then adjusted to the satisfaction of all hands. But even now some of them are a little short. The custom in taking up placer claims is to locate 500 feet the way the valley lies, and then run across from base to base of the foothills. In the Bonanza Creek it is 800 feet to the base lines.

The Dominion Land Surveyor is also a magistrate, and has the power to take sworn testimony, which he did in the case of the false measurements. The men who had engaged in the work, both of playing short rope and shifting stakes, a crime punishable by seven years in the penitentiary, told all they knew, and clemency was shown them, owing to their greatly excited condition at the time. None of them were prosecuted.

The Dark Shadow in the Picture.

Now, let us look a little at the other side of the

question, quoting letters from and conversation with competent parties:

H. Dore, Thomas Moran, and Joe Deorache, of the Klondyke party, came to Chicago in August, 1897, loaded down with "pay dirt." They were going to their homes, near Montreal, Canada, to spend the winter. Dore was one of the first in on the Klondyke discovery.

"I left Quebec two years ago," said he, "and remained at Forty Mile Creek all winter. There was nothing in it but hard work. When the Klondyke was discovered I abandoned my claim at Forty Mile Creek, and was one of the first to take a claim. I traded in my Forty Mile Creek claim for a third interest in a mine at Klondyke.

"I worked hard all last winter and made some money. How much? Well, I do not believe in saying. All this talk about gold is exciting people to a frenzy, and I consider it bad. I do not know how it is going to end unless there are more discoveries. Klondyke will support about 5,000 people. I expect there are fully 10,000 people there now. I fail to see how they can get along. Of course Alaska is a big country. It has not been scratched by prospectors yet. There is room for a population of 3,000,000 people if they can find additional mines and get food enough up there. That is the trouble. There never has been enough to eat for the people who would develop the country.

Rich Mines in Alaska Also.

"I have no doubt there are as rich, if not richer, mines in Alaska than what have been found. But the first thing is to find these other localities. That is what the people who go there

next summer will have to do. There is no room for them in the Klondyke field. But, as I say, it is a big country and there are liable to be some immense finds. Only last fall Klondyke was comparative unknown. There was some gold found on the surface and then the rush began. Nothing was known as to what was beneath until along in the winter.

"Yes, I shall go back in the spring. My friends tell about the same story as myself. We all have made some money and are going to take a rest. I only want to warn people about rushing to the Klondyke in the fall of the year. There is nothing in it and they will be stuck at the coast. It will be a long, dreary winter, and many will be so discouraged that they will turn back in the spring."

Here is another unbiased opinion passed upon the same subject:

Returning with Full Hands.

Charles E. Meyers, who disappeared from his home in Rockford, Ill., twenty-one years ago, returned August 14, 1897, bringing a fortune from the Klondyke gold fields.

Meyers went to Alaska in 1892, shortly before the first settlement was made at Circle City. With a party of miners he pushed eastward through Chilkoot Pass and reached the gold fields. He located a claim on Bonanza Creek and for a year has been adding to his hoard of the yellow metal. On returning to the States a few days ago he brought over \$100,000 and will give his sister a fortune.

Meyers spoke entertainingly of Klondyke and the hardships that must be endured there. He

said that hundreds of the men who are rushing to that country now must perish. Lack of food and a climate to which they are unused will cause their death. He added:

"We who have been there years have taken every claim that has been found that promises to pay richly. There is, of course, room for all who go, but the new miner will find the summer almost gone before he can reach a claim that will repay working.

"The hardships of the Alaskan winter are indescribable, and any man who can make a living in this country is a fool to go to that land of cold in search of riches."

In appearance Meyers looked the typical miner, and his dress indicated the land whence he came. He wore a nugget worth \$150 as a boutonniere, and his watch is held by a chain of nuggets worth \$500. He carries dozens of small nuggets and distributes them with prodigal hand among his old friends.

Meyers is a man of unusual intelligence and intends writing a series of articles on his Alaskan experiences. He will return to Circle City next year to engage in the transportation business, and also to develop by proper machinery a rich claim he has located. He believes the Alaskan gold fields offer unlimited opportunity not only to mining companies but traders.

A Group of Fortunate Ones.

Eight lucky discoverers from the Klondyke were registered about the middle of August, 1897, at the Great Northern Hotel and Palmer Hotel, in Chicago.

One of them, Albert D. Grey, of Grand Rapids, Wis., is looked upon as the luckiest man in the party. A year ago he was a country school teacher in a Wisconsin town. Now he modestly estimates the value of his holdings in the Klondyke district at \$300,000, but he admits that amount in cash would not tempt him to sell out. His friends say he will be worth a million when his claims are worked out.

Mr. Grey is 22 years old. Last year he started on a pleasure trip to Juneau, Alaska. His funds gave out, and he was forced to go to work. He joined a party of thirteen "tenderfeet," and went up the Stikine River and helped cut a new trail to Lake Teslin.

Before the lake was reached eleven of the party gave up in disgust. Grey and his friend, William Chapple, were left alone with less than a year's provisions, while the eleven men went back to Juneau and nearly starved there during the winter. Grey and Chapple pushed on to Lake Teslin.

The two determined gold-seekers built a raft of logs and started down the river. They left Juneau in June and arrived at the mouth of the Klondyke in October, as "green" a pair of boys as ever found their way into a strange country.

Mr. Grey said the wealth of the valley has not and cannot be exaggerated. It is the richest country in the world, he believes, and there is no danger of the gold giving out for ten years, even if no more deposits are found.

He added that the climate is all that it has been represented.



The long line up the Chilkoot Pass.

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A Man Who Liked the Cold.

"It was 72° below zero last winter," he said, "but I did not lose a day's work, and strange as it may seem, I did not wear a coat and I lived in a small tent all winter. I wore heavy underclothing and thick woolen shirts. I was out of doors half the time when at work. Instead of boots or shoes, the miners wrap their feet in heavy stockings and pieces of blankets two feet square. In the summer rubber boots are used.

"The cold, though intense, is not so bad as in Chicago or other places in this latitude. The air is perfectly dry and there is little snow and no rain in the interior.

"I have never been sick a day in Alaska and I saw all the hardships possible. We nearly starved last winter. Toward spring, before the new supplies arrived, there was practically nothing left in camp but navy beans, and 200 men lived several weeks on these with a little popcorn which we ground into flour in small coffee mills and managed to make into a substitute for corn meal.

"The transportation companies, which have a monopoly of the food supply, have literally robbed the miners, if high prices can be called by such a hard name. We paid \$1.20 a pound for flour. Five pounds of lard cost \$13, and all other prices were in proportion. Fresh meat cost \$1 a pound. We paid \$1.50 for a cup of coffee and a sandwich up to the time we left there for home.

"Every man going in should take provisions with him as a measure of economy, if not of necessity. Last winter 200 men, with \$1,000,000

among them, came within an ace of actual starvation. The little food was common property, and I never knew of a miner refusing to divide with his neighbor, even down to the last sack of flour.

"There will be lots of suffering and, perhaps, some lawlessness. The old prospectors are preparing for and predicting a hard winter. I consider it absolutely impossible to reach the Klondyke after September 1.

Battles with the Mosquitoes.

"Our party started in June. We went up the Stikkeen River and were nearly driven back by mosquitoes. The half has never been told of this pest in Alaska. I have seen the sun almost darkened by mosquito swarms, and once our pack train was stampeded by them and we lost half of our supplies.

"On the way down the Lewis River we stopped several times to fish and to prospect. Both Chapple and myself were green at prospecting, but we took \$500 out of the bars on the Hotalinqua River in twenty days with a rocker and gold pan. This money paid for our grub stake. We heard nothing of the Klondyke strike until we reached the Cassiar Bar, where we met two men coming out who told us the news.

"We pulled up and started as quickly as possible. We arrived in October, after all the good claims were staked.

"We first started to build a cabin, but before it was done we got a chance to work a claim on shares. This gave each of us one-fourth interest in the output. We took out \$80,000 in thirty days from Claim 30 on El Dorado Creek, and

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\$12,000 in twenty days from 36 El Dorado. I am now interested in 30 El Dorado, 27 Hunker, 3A Hunker, 8A Bonanza, 50 below discovery Bonanza, and No. 1 Gay Gulch. All are rich, and among the best in the district."

THE SONG OF THE KLONDYKE.

All you miners, wide awake!
Go to the Klondyke; make your stake.
Get out your pick, your pan, your pack,
Go to the Klondyke; don't come back.

Ho, for the Klondyke, ho!

There's gold enough for you and me,
On the hill and the plain, wherever you be;
And it's yellow and rich, and heavy as lead,
But half of the truth has never been said.

Ho, for the Klondyke, ho!

No man there has ever been broke,
And there's gold enough for the women folk;
And the nights are short when the days are long;
So pack your tools and sing this song:

Ho, for the Klondyke, ho!

CHORUS.

Ho, for the Klondyke,
Ho, for the Klondyke,
Ho, for the Klondyke, ho!

Put on your pack
And don't come back
Till you fill your sack
On the Northwest track.

Ho, ho, for the Klondyke, ho!

CHAPTER II.

WHO OUGHT TO GO TO THE KLONDYKE.

Medical Advice and How to Avoid Hardships.

To give absolutely safe medical advice on the subject of who should and who should not go to the Klondyke is a hard task. The common talk about the fatal effects of arctic cold may be discounted largely. Man—especially man reared in the temperate zone—has the power of assimilating himself with climatic changes more than any other mammal. Changes from hot to cold, from moist to dry, from high altitudes to sea coast, and the reverse, are found beneficial in individual cases in the highest degree.

For many constitutions the bracing effect of a trip to Northern latitudes is positively beneficial. Snow and ice are not in themselves by any means injurious to the physical health of the average native of the temperate zone, unless the soil of the district where they occur is of a nature to retain dampness. Clays are bad in this respect; gravelly soils are safe.

Scientific records have well established that the average duration of human life is greater in proportion as the residence is advanced from the equator toward the poles. There is more risk

of disease in a voyage to India or Panama than in one to Bering Straits.

Climate, however, is not the only thing to be considered when there is question, in a medical sense, of the risks of a distant and laborious expedition, undertaken by a multitude of persons widely differing in the capacity of individuals for enduring hardship and privations.

Men should be sober, strong and healthy. They should be practical men, able to adapt themselves quickly to their surroundings. It is also very important to consider their temperaments. Men should be of cheerful, hopeful dispositions and willing workers. Those of sullen, morose natures, although they may be good workers, are very apt, as soon as the novelty of the country wears off, to become dissatisfied, pessimistic and melancholy.

To the weak, or those disposed to special ailments, conditions which are only invigorating to the man in average health are often absolutely fatal. Weak hearts and weak lungs cannot face Northern blasts or temperatures below zero. Rheumatism and its kindred affections are equally ill-fitted for such tests. Nor are such persons, whether young or old, as have been long accustomed to purely sedentary occupations or to lives of ease, physically fitted for the hardships of the Klondyke. Weak eyes would be severely tested by the glare of a snow-covered land, and blindness is but one of the dangers to be feared by arctic explorers.

In brief, I would say that persons subject to troubles of the heart, throat, or lungs, should stay away from the Klondyke. Physical exhaustion, colds, scurvy, rheumatism, and snow blind-

ness are the chief dangers to be apprehended on the trip from a medical standpoint. For the healthy, in other respects than those mentioned there is no more danger to be dreaded than in any ordinary change of residence. Alaska is not more unhealthful in itself than Norway, or the northern parts of Scotland. Only those that are able to bear hardships should face them, but as far as hygienic conditions go, there need be no special apprehension on the score of Alaska. In conclusion, I would say to those of weak lungs and weak hearts, and sedentary people generally, stay at home. The others may balance their chances without need of doctors' advice.

A Model Medicine Chest.

We would advise all persons who contemplate going to the Klondyke region to include in their outfits a medicine chest containing the following drugs, the cost of which should be within \$10:

Quinine pills.....	50
Compound cathartic pills.....	50
Acetanilid tablets.....	3 dozen
Chlorate potash.....	1 box
Mustard plasters.....	6
Belladonna plasters.....	6
Carbolic salve.....	4 ounces
Chloroform liniment.....	8 ounces
Witch hazel.....	1 pint
Essence ginger.....	4 ounces
Paregoric.....	4 ounces
Laudanum.....	1 ounce
Borax.....	4 ounces
Tincture iodine.....	1 ounce
Spirits of nitre.....	2 ounces
Tincture of iron.....	1 ounce

Cough mixture.....	8 ounces
Toothache drops.....	1 bottle
Vaseline.....	1 bottle
Iodoform.....	2 drams
Lint.....	2 yards
Assorted bandages.....	$\frac{1}{2}$ dozen
Rubber adhesive plasters.....	2 feet
Absorbent cotton	4 ounces

Monsell's salts for hemorrhages—In quantities in accordance with the person's liability to attacks of the trouble.

The Climate.

[FROM OFFICIAL REPORTS.]

The climate of the interior, including in that designation practically all of the country except a narrow fringe of coast margin and the territory before referred to as temperate Alaska, is one of extreme rigor in winter, with a short but relatively hot summer, especially when the sky is free from cloud.

In the Klondyke region in midwinter the sun rises from 9:30 to 10 a. m. and sets from 2 to 3 p. m., the total length of daylight being about four hours. Remembering that the sun rises but a few degrees above the horizon and that it is wholly obscured on a great many days, the character of the winter months may easily be imagined. The United States coast and geodetic survey published a series of six months' observations on the Yukon, not far from the site of the present gold discoveries. They were made with standard instruments and are wholly reliable.

The mean temperatures of the months from October, 1889, to April, 1890, both inclusive, were as follows:

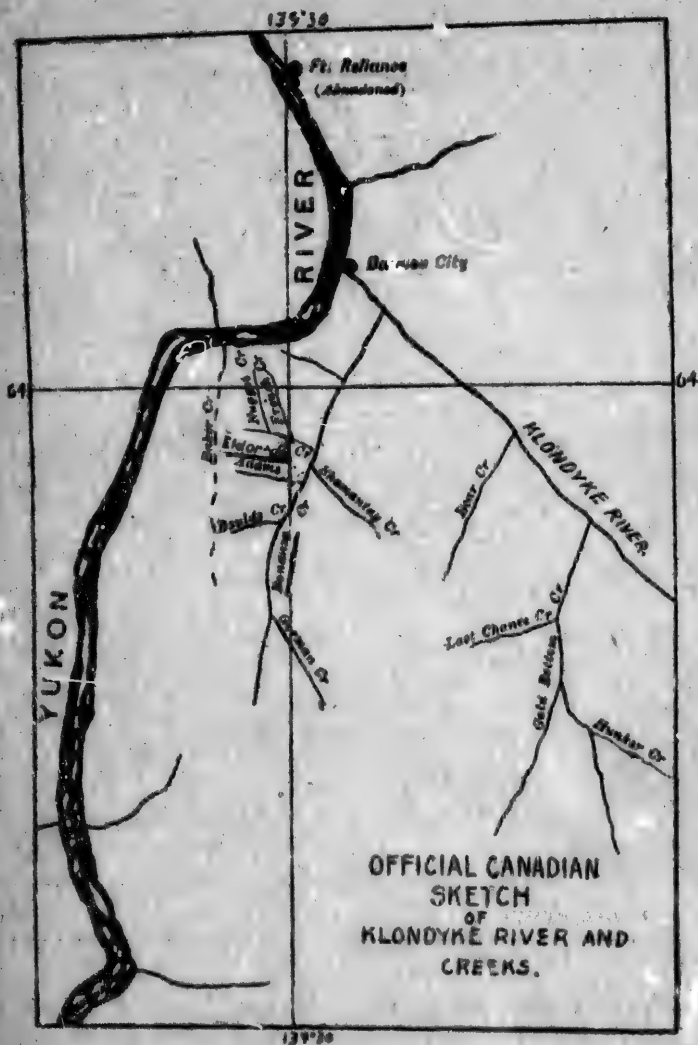
October, 33 degrees; November, 3 degrees; December, 11 degrees below zero; January, 17 below zero; February, 15 below zero; March, 6 above; April, 20 above. The daily mean temperature fell and remained below the freezing point (32 degrees) from November 4, 1889, to April 21, 1890, thus giving 168 days as the length of the closed season of 1889-90, assuming that outdoor operations are controlled by temperature only. The lowest temperatures registered during the winter were 32 degrees below zero in November, 47 below in December, 59 below in January, 55 below in February, 45 below in March, and 26 below in April. The greatest continuous cold occurred in February, 1890, when the daily mean for five consecutive days was 47 degrees below zero.

"Greater cold than that here noted has been experienced in the United States for a very short time, but never has it continued so very cold for so long a time. In the interior of Alaska, the winter sets in as early as September, when snowstorms may be expected in the mountains and passes. Headway during one of those storms is impossible, and the traveler who is overtaken by one of them is fortunate if he escapes with his life. Snowstorms of great severity may occur in any month from September to May, inclusive.

"The changes of temperature from winter to summer are rapid, owing to the great increase in the length of the day. In May the sun rises at about 3 a. m. and sets about 9 p. m. In June it rises at 1:30 o'clock in the morning and sets at about 10:30 o'clock, giving about twenty hours of daylight and diffuse twilight the re-

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mainder of the time. The mean summer temperature in the interior doubtless ranges between 60 and 70 degrees, according to elevation, being highest in the middle and lower Yukon valleys."

Life Insurance Risks.

Life insurance companies in the United States consider the uncertain conditions of the Klondyke regions so endangering to health that they have warned their agents against insuring any one bound for the gold fields in the land of the midday night.

One man was heard to express the situation like this: "If I get to the Klondyke and make a stake, I will have money to burn and the insurance will be easy. If I don't pull a big thing out of the ground out there I will never show up again and will make a winner on the life insurance."

The New York Life Insurance company was the first to realize the situation, and soon all the regular companies' agents began to ask applicants: "Are you going to the Klondyke?"

The Equitable Life Assurance company is said to be contemplating fixing an extra rate of insurance for Alaska gold hunters. When Prof. Chatterlain made his arctic trip he secured insurance by paying \$5 to a \$1,000 risk more than the regular rate, and this added amount may be adopted by the Equitable company, but the local agents have not yet received official information to that effect.

Owing to the incontestable features of most of the insurance policies sold in recent years the insurance companies cannot void a policy that

has been in operation one or more years. There are, however, certain policies that fix restrictions regarding travel and occupation, and such policies will doubtless be forfeited if the holders undertake a trip to the northland gold regions.

Owing to the widespread attempt on the part of gold-seekers to protect their families by life insurance, the companies are on the alert to discover efforts at deceit, and notice has been given that all policies taken out by persons who soon after leave for the Klondyke or Alaska gold fields will be cancelled on the ground of attempted fraud.



Rafting over the lakes.

CHAPTER III.

WHAT TO TAKE WITH YOU.

List of Articles Necessary for a Complete Outfit for a Klondyke Expedition.

Articles.	Weight, Lbs.	Cost.
Clothing.....	65	\$75
Two suits heavy underwear, 6 pairs heavy woolen stockings, 2 pairs blanket lined mittens, 1 heavy mackinaw coat, 2 pairs mackinaw trousers, 2 dark wool- en overshirts, 1 heavy sweater, 1 heavy rubber lined top coat, 2 pairs heavy rubber boots, or arc- tic overshoes with felt leggins, 2 pairs shoes, 1 Canadian snow- shoeing cap, 1 pair extra heavy blankets, 1 suit oil clothing, 2 pairs overalls, needles, thread, beeswax, and towels.		
Groceries	590	50
Three hundred and fifty pounds of flour, 150 pounds of bacon, 50 pounds of beans, 10 pounds of tea, 5 pounds of baking powder, 50 pounds of salt, 25 pounds dried fruit, 25 pounds of desiccated veg- etables, 5 pounds of soap, 1 tin of matches, 1/2 pound of saccharine.		

Hardware	70	\$50
One long-handled shovel, 1 pick, 1 ax, 5 pounds of wire nails, 5 pounds of pitch, 3 pounds of oak- um, 2 large files, hammer, brace- and-bit, large whipsaw, 150 feet 5/8-inch rope, drawknife, chisel, scythe, stone, shaving outfit, cooking utensils, 2 buckets, and gold pan.		
Armament.....	40	29
One repeating rifle, 40-82, with reloading tools and 100 rounds of brass-shell cartridges, 1 large hunting knife, and an assortment of fishing tackle.		
Camping outfit.....	30	20
One heavy canvas tent, 8x10, 1 heavy canvas sleeping bag, 1 sheet-iron stove, made in col- lapsible form, and with telescopic pipe; guy and peg ropes for tent.		
Totals.....	795	\$224

Cost and weight of outfit and expense of transportation can be materially reduced by prospectors traveling in groups of three or four, as one camping, hardware, and armament rig will answer for two men. In traveling by steamer or rail, 150 pounds of baggage is checked free for each passenger.

An Express Company to Alaska Ports.

The Alaskan Pacific Express Company was organized in August, 1897, to transport merchandise, money, and valuables to and from

points touched by the company's steamers in Alaska, particularly between Tacoma, Seattle, and Port Townsend, and Dyea, Juneau, Sitka, Skagaway, Wrangell, and intermediate points.

How to Get Your Belongings to the Klondyke Region.

From San Francisco or Seattle to St. Michaels or Dyea by sea, above 200 pounds, which go free, the steamship companies charge 10 cents a pound, and refuse to accept more than 1,000 pounds per passenger. These rates, of course, may come down when more steamers are placed on the route to the new gold fields.

Over the St. Michael's all water route, the Alaska and the North American companies take care of the baggage and freight up to Dawson City, that is during the short summer season—June to September—when navigation over the Yukon river is opened.

Passengers over the Dyea inlet and the mountain passes have to take full charge of their belongings from the moment the steamer reaches the harbor, which is practically no harbor at all. The vessel anchors quite a distance from land, and arrangements must be made at very high prices for transporting the goods in canoes from the steamer to "terra firma." Surveyor Ogilvie says about the Alaska Indians, whose exactions are to be met at every corner the moment Alaska is reached:

"These Indians are perfectly heartless. They will not render even the smallest aid to each other without payment; and if not to each other, much less to a white man. I got one of them,

whom I had previously assisted with his pack, to take me and two of my party over a small creek in his canoe. After putting us across he asked for money, and I gave him half a dollar. Another man stepped up and demanded pay, stating that the canoe was his. To see what the



Over the White Pass.

result would be, I gave to him the same amount as to the first. Immediately there were three or four more claimants for the canoe. I dismissed them with a blessing, and made up my mind that I would wade the next creek."

At the writing of this book the Indians were obtaining from 18 to 25 cents a pound for carrying miners' supplies over the Chilkoot Pass. There were not enough horses or Indians to carry over one-tenth part of the accumulated goods.

Once on the other side of the mountains, Lake Lindeman is reached, and a boat and a raft have to be purchased or built to be used for the rest of the trip. In August, 1897, lumber was sold by the small saw-mill in operation there at the rate of \$150 per thousand feet. Boats were not to be had at any price; and, as a rule, the travelers have got to do their own ship-building and carpentering. In fact, people, to save time, should take their boats with them from San Francisco or Seattle. A knock-down boat that will carry a ton costs about \$18 and weighs about 200 pounds. It is taken apart, with no pieces more than six or seven feet long, and packed for shipping. The principal objection to them is that the Indians and packers dislike to contract to carry them over the mountains on account of their awkward shape. One builder has worked out a model for a galvanized iron boat that can be carried in sections fitting together like a "nest" of custard dishes, and can be put together with small bolts. A canvas folding boat that will carry two tons and is constructed on good lines would be very available for the rivers and lakes. A keel, mast, and some additional bracing could be added after reaching the interior.

Valuable Hints About Supplies.

F. S. Ruckman, of Chicago, who has spent several years in the Klondyke district, predicted an abundance of hardship and privation, not to mention sickness that may befall the seeker after gold who goes to Alaska equipped as some have recommended.

He said:

"Having spent several years in Alaska, I want to warn those who contemplate going there against the imaginative estimates of the amount of food one should take into the country for a year's tour. I have been shown a recommendation like this: 250 pounds of flour, 150 pounds of bacon, 100 pounds of beans, 10 pounds of tea, 10 pounds of baking powder, 5 pounds of salt, etc. Now we will say that with 100 pounds of cornmeal 250 pounds of flour would be sufficient for a year, but when they say 10 pounds of baking powder and 5 pounds of salt there is something wrong. Ask any housewife how much baking powder she uses to 250 pounds of flour. She will tell you about a pound to every 100 pounds of flour. And as for salt, why, one would use five pounds to salt down the hind quarters of a moose or caribou. To be without salt would be as fatal as to be without food. Salt is as essential as flour, if not more so, and any one who goes to Alaska should figure on at least three pounds a week. That is about 100 to 150 pounds a year.

"Now, 100 pounds of beans is about equal to about 100 quarts, and 100 quarts for one person should last, provided he eat them twice a day, about 800 days, or more than two years, while his flour would last him 250 days. Ten pounds

of tea would last him 20 months, and 10 pounds of soap would last him a lifetime, as miners use sand in place of soap.

"Forty feet of five-inch rope is also specified, which is hardly sufficient to tie a couple of knots. If one was in the midst of a current that required an anchor fifty feet would hardly be enough; 350 feet would be nearer a prospector's line. Fifty feet might make a good whip, but not a line for a Yukoner. They further describe a heavy canvas sleeping bag, which I have never seen, a common tarpaulin having always answered for a bed when laid over spruce or tamarack boughs. Still people read with interest these illusive revised lists of outfits, little dreaming of the trouble they will bring."

The Salt of the Earth.

Just how valuable salt sometimes becomes in the gold fields is illustrated in a story told by a miner who lately returned from there. His party ran out of that useful article, and it seemed that they would die without it. They came across another party that had salt, but refused to part with it. A pitched battle was about to begin for possession of the salt, when some one suggested that those who owned the salt were not overly flush with gold dust, while those who had no salt had plenty of gold. It was then arranged that gold should be weighed against the salt, and this was done.

CHAPTER IV.

THE QUICKEST ROUTES.

Approximate Distances to Dawson City.

[FROM CANADIAN GOVERNMENT DATA]

VIA ST. MICHAEL.

	Miles.
San Francisco to Dutch Harbor.....	2,400
Seattle or Victoria to Dutch Harbor....	2,000
Dutch Harbor to St. Michael.....	750
St. Michael to Dawson City.....	1,600

VIA DYEA INLET AND CHILKOOT PASS, OR SKAGAWAY AND WHITE PASS.

Seattle or Victoria to Dyea or Skagaway	1,000
Dyea or Skagaway to Dawson City.....	575

VIA STIKEEN RIVER.

Seattle or Victoria to Wrangell.....	750
Wrangell to Telegraph Creek.....	150
Telegraph Creek to Teslin Lake.....	150
Teslin Lake to Dawson City.....	600

DISTANCES FROM HEAD OF DYEA INLET.

Head of canoe navigation, Dyea inlet..	5.90
Forks of Dyea River.....	8.38
Summit of Dyea Pass.....	14.76
Landing at Lake Lindeman.....	23.06
Foot of Lake Lindeman.....	27.49
Head of Lake Bennett.....	28.09

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Miles.

2,400

2,000

750

1,600

OR

1,000

575

750

150

150

600

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5.90

8.38

14.76

23.06

27.49

28.09

building at Lake Lindeman.



Foot of Lake Bennett.....	53.95
Foot of Caribou Crossing (Lake Nares)	56.44
Foot of Tagish Lake.....	73.25
Head of Marsh Lake.....	78.15
Foot of Marsh Lake.....	97.21
Head of Canon.....	122.94
Foot of Canon.....	123.56
Head of White Horse Rapids.....	124.95
Foot of White Horse Rapids.....	125.33
Tahkeena River.....	139.92
Head of Lake Lebarge.....	153.07
Foot of Lake Lebarge.....	184.22
Teslinto River.....	215.88
Big Salmon River.....	249.33
Little Salmon River.....	285.54
Five Finger Rapids.....	344.83
Pelly River.....	403.29
White River.....	499.11
Stewart River.....	508.91
Sixty Mile Creek.....	530.41
Dawson City.....	575.70
Fort Reliance.....	582.20
Forty Mile River.....	627.08
Canadian Boundary Line.....	667.43

By Way of St. Michael and Up the Yukon.

This is open only four months in the year (June to September) and is called the "all water route," as it leads the traveler straight from the Pacific Coast to the Island of St. Michael, and from that point—by stern-wheel steamboats built on purpose—to the very bank on which is situated Dawson City. The trip, in the best time of the year, takes fully 35 days from Seattle up the river, and about 25 days down the river and home.

Over the Chilkoot Pass and the Chain of Lakes.

Here is a good description of a trip over the Chilkoot Pass given by a most reliable explorer, Dr. E. O. Crewe, just returned from the Klondyke:

"From the head of the new navigation, six miles north of Dyea, where you are taken by steamer," he said, "the overland trip to Lake Lindeman is only twenty-eight miles. Traveling with a pack one does not go fast, and the trip generally takes three days, but there is only one hard day, and that isn't hard unless you think so. The first day—to Sheep Camp—is as pleasant as a walk in State street, Chicago. The next stop is at the Stone House, as it is called. There you get up early in the morning to get an early start, and at night you will camp three or four miles beyond the pass. Why, I have crossed the pass itself with 100 pounds on my back in three hours. Sometimes it was like climbing the roof of the house. Sometimes I was in snow and slush up to my knees. But there is no danger and no difficulty. You can't lose your way. There's a wall of rock on one side and a wall of ice on the other—no chasms to fall into, no crevices in the ice. It isn't as hard as climbing half way up Pike's Peak, a trick that hundreds of tourists do every year for pleasure. And that's all there is to the horrors of Chilkoot Pass that so much is said about."

After describing the overland trip to Lake Lindeman Dr. Crewe pointed out the road through the chain of lakes—Bennett, Taku, and Marsh—telling which shore to follow at each stage in the journey to avoid sharp stones that

might ruin their boats; telling also where and how to build rafts and boats; how to portage around rapids, and emphasizing the necessity for taking care of food supplies in order not to be left without any food. At Lake Lebarge, at this season of the year (September) game would be found in plenty, and a provident man, by proper care, can thus secure food supplies.

The cost of living in the Yukon region, he added, had been greatly exaggerated, and he told how every spring, oranges could be bought for 50 cents a dozen at Dawson, fresh onions and potatoes for 15 cents a pound, and flour and other provisions much cheaper than they can be packed in. He advised any intending to go to wait until late next March, then take the Chilkoot Pass route, when they can haul 500 pounds over the pass on a sledge, when the snow is frozen at night, easier than they can pack fifty pounds over in the fall season.

"Many men will come back disheartened," said he finally, "but it will be because they are too easily discouraged, have too little pluck, or are unwilling to work. Alaska is the poor man's mining country. It is every man for himself, and thousands of men who have nothing will go there and in a year, by proper diligence, wash out \$2,000 to \$10,000, and many of them a great deal more, above all their expenses."

Over the White Pass.

The active work of hundreds of incomers has cut a pass from Skagaway Bay to the lakes, and horses can travel over its whole length. This is called the White Pass, and has great chances of becoming the favorite road of the rushing

crowds. It is not more than 24 miles from Lake Lindeman, and the real hardships and dangers of the Chilkoot Pass are thus avoided. With the coming of snow, sleds can be used, reducing materially the cost of transportation, which was until winter set in, from 15 to 20 cents per pound of freight.

The Stikeen Route.

It was announced recently that the Dominion government is at work constructing a wagon road from the terminus of the Stikeen River road to the Yukon.

The length of the new road to be built is 160 miles, 80 of which is said to be under contract to be finished this season. The route will be wholly within British territory.

The Overland or "Back Door" Route.

DESCRIBED BY CRAFT W. HIGGINS, OF CHICAGO.

"The jumping-off place is at Edmonton, on the Canadian Pacific Railway. A stage line runs from there to Athabasca Landing, on the Athabasca River, and the Canadian Pacific intends to extend its line north from Edmonton to that point. At Edmonton the Canadian Pacific owns very large coal mines. From Athabasca Landing you can take a canoe and go down with the current to Athabasca Lake, and then into Great Slave Lake, through which runs the Mackenzie River, by which you reach the Arctic Ocean. When the mouth of the Mackenzie is reached, the Peel River can be taken south to the Rocky Mountains, which are crossed by trail. When across the range, the Stewart River opens the way to the near-by Klondyke regions.

"From the Athabasca River to the Mouth of the Mackenzie the distance is 1,882 miles, as given by the Hudson Bay Company, which has a number of trading posts, well stocked with



Map of the "Back Door" Route.

provisions and supplies of all kinds, at short intervals along the route, as it has been using this trail for the last 100 years. The portages

are all short, with the exception of one at Smith's Landing of about sixteen miles, but this is very easy to make. One can take the splendid tramway which the Hudson Bay Company has built. None of the other portages is more than a few hundred yards in length. The trip is down grade all the way, and wherever there is water of any depth at all, small freight steamers are continually plying back and forth. The trip can be made from Edmonton to the mouth of the Mackenzie in less than sixty days, but if Peel River is frozen, dog trains will have to be taken from there to the Klondyke; but even with these the disadvantages and hardships will not be half those to be overcome in going by way of Dyea. One great advantage of this route is that it is an organized line of travel, and the numerous posts of the Hudson Bay Company can furnish prospectors with ample supplies, enabling them to travel very light, as only sufficient supplies are necessary to last from one post to another.

"I would not like to say just exactly what the cost of a trip via the 'back-door route' would be, but I think it could be made for less money than any of the others which are now so popular. Canoes can be obtained readily from the Indians, but it is not advisable to attempt to use them without the assistance of an Indian who is familiar with the frail birch-bark canoes. These canoes can be secured to carry several tons. The Hudson Bay company also contracts to take freight north on their steamers during the season of open navigation.

"With a small expenditure of money this route can be improved and the facilities in-

creased so that any amount of freight and any number of passengers can be taken to the gold regions. I was told at Edmonton that still south of the international boundary line the mountains were very high, but that the elevation continually lowered northward until there remained only a high plateau. In fact, the pass through the Rocky Mountains which the British Pacific will use is some 200 miles north of the Canadian Pacific and only about 2,200 feet high, being the lowest elevation at which any transcontinental road crosses the divide.

"In talking with members of the Hudson Bay posts and officers of the Canadian mounted police at Calgary and Edmonton, and also at Victoria and up in the famous Caribou country, I was told that several years ago some \$60,000,000 in gold was taken out; that the mines were being worked by hydraulic mining; that all the beds of the small streams from the 60th parallel to the mouth of the Mackenzie River were filled with gold. A great number of those running west from the Mackenzie River eventually empty into the Yukon. When I was told this, of course, I did not pay so much attention to it, because the gold fever was not so rampant as at present. The Cassiar and Omineca districts have long been known to be extensively rich in gold, and if one-half of what has been told me is true they will not only rival but surpass the now famous Klondyke. I have seen any number of the most beautiful specimens of white quartz filled with gold, and when the method of quartz mining is perfected up in that far north the present placer claims will soon seem wonderfully poor in comparison.

"Dr. Dawson (after whom Dawson City was named), the eminent geologist of the Canadian government, who only a few years ago made an extensive and exhaustive geological survey of the northwestern provinces of Canada, told me that he considered the reason for the gold being found in the small streams was due to the breaking and grinding action of the glaciers more than from any other cause. Gold undoubtedly exists in places in large and paying quantities, but quartz mining requires machinery and money, and, of course, is not the poor man's proposition, as is placer mining."

A Tramway Over the Pass.

Captain McCormick of the regular army is the superintendent of an Eastern company, whose purpose it is to construct a tramway from Dyce to Lake Lindeman. New York capital to the amount of half a million had been subscribed for the new enterprise, and the Captain thinks it can be completed in quick time. A large amount of necessary material has already gone forward, and the men at Dyce, it was thought, would assist in pushing the tramway through vigorously, taking transportation in payment for labor. This is one of the most promising of all the new enterprises that have been inaugurated in Alaska during the great rush of the Klondykers.

CHAPTER V.

MINING METHODS AND PROCESSES

Placer Mining.

In "placer mining" no machinery is needed; that's why it has been called the "poor man's method." When upon a likely location, the miner clears all the coarse gravel and stone off a patch of ground, and lifts a little of the finer gravel or sand in his pan, which is a broad, shallow dish, made of strong sheet iron; he then puts in water enough to fill the pan, and gives a few rapid whirls and shakes; this tends to bring the gold to the bottom on account of its greater specific gravity. The dish is then shaken and held in such a way that the gravel and sand are gradually washed out. Finally, all that is left in the pan is whatever gold may have been in the dish and some black sand, which almost invariably accompanies it.

Should the gold thus found be fine, the contents of the pan are thrown into a barrel containing water and a pound or two of mercury. As soon as the gold comes in contact with the mercury it combines with it and forms an amalgam. The process is continued until enough amalgam has been formed to pay for "roasting" or "firing." It is then squeezed through a buckskin bag, all the mercury that comes through the bag being put back into the barrel to serve



Dog sledges on the trail.

again and what remains in the bag is placed in a retort, if the miner has one, or, if not, on a shovel, and heated until nearly all the mercury is vaporized. The gold then remains in a lump with some mercury still held in combination with it.

This is called the "pan" or "hand" method, and is never, on account of its slowness and laboriousness, continued for any length of time when it is possible to procure a "rocker," or to make and work sluices.

The Rocker Replaces the Pan.

The "rocker" is simply a box about three feet long and two wide, made in two parts, the top part being shallow, with a heavy sheet-iron bottom, which is punched full of quarter-inch holes. The other part of the box is fitted with an inclined shelf about midway in its depth, which is six or eight inches lower at its lower end than at its upper. Over this is placed a piece of heavy woolen blanket. The whole is then mounted on two rockers, much resembling those of an ordinary cradle, and when in use they are placed on two blocks of wood so that the whole may be readily rocked. After the miner has selected his claim, he looks for the most convenient place to set up his "rocker," which must be near a good supply of water. Then he proceeds to clear away all the stones and coarse gravel, gathering the finer gravel and sand in a heap near the "rocker." The shallow box on top is filled with this, and with one hand the miner rocks it, while with the other he ladles in water. The finer matter with the gold falls through the holes onto the blanket, which checks its progress, and holds the fine particles of gold, while the sand and other matter pass over it to the bottom of the box which is sloped, so that what comes through is washed downward and finally out of the box. Across the bottom of the box are fixed thin slats, behind which some mercury is placed to catch any particles of gold which may escape the blanket. If the gold is nuggety, the large nuggets are found in the upper box, their weight detaining them until all the lighter stuff has passed through, and the smaller ones are held by a deeper slat

at the outward end of the bottom of the box. The piece of blanket is, at intervals, taken out and rinsed into a barrel; if the gold is fine, mercury is placed at the bottom of the barrel, as already mentioned.



At work on the gold creeks.

The Sluicing Process.

"Sluicing" is always employed when possible. It requires a good supply of water, with sufficient head or fall. The process is as follows: Planks are procured and formed into a box of suitable width and depth. Slats are fixed across

the bottom of the box at suitable intervals, or shallow holes bored in the bottom in such order that no particle could run along the bottom in a straight line and escape without running over a hole. Several of these boxes are then set up with a considerable slope, and are fitted into one another at the ends like a stovepipe. A stream of water is now directed into the upper end of the highest box. The gravel having been collected, as in the case of the rocker, it is shoveled into the upper box and is washed downward by the strong current of water. The gold is detained by its weight, and is held by the slats or in the holes mentioned. If it is fine, mercury is placed behind the slats or in the holes to catch it. In this way about three times as much dirt can be washed as by the rocker, and consequently three times as much gold is secured in a given time. After the boxes are done with they are burned, and the ashes washed for the gold held in the wood.

Winter Mining.

THE OLD AND NEW METHODS.

A great many of the miners spend their time in the summer prospecting and in the winter resort to a method lately adopted and which is called "burning." They make fires on the surface, thus thawing the ground until the bed rock is reached, then drift and tunnel. The pay dirt is brought to the surface and heaped in a pile until spring, when water can be obtained. The sluice boxes are then set up and the dirt is washed out, thus enabling the miner to work advantageously and profitably the year around. This method has been found very satisfactory

in places where the pay streak is at any great depth from the surface. In this way the complaint is overcome which has been so commonly



The new woman digging for gold.

advanced by the miners and others, that in the Yukon several months in the year are lost in idleness.

A Chicago man, Mr. Charles Dupee, has brought forward an invention of his that will perfect and cheapen in price the "burning process" now in use in the Klondyke gold fields. The machine with which he proposes to thaw the Alaskan soil has been in actual operation in Chicago and has been seen to melt the solid asphalt of the boulevards so that the paving could be lifted with a shovel. The machine burns oil and is portable, being so light that a man can move it from point to point at will. The oil is contained in a tank, which is mounted on wheels, and which is provided with a bellows or blower to force air into the tank and to force the oil out. A lead of pipe runs under a piece of sheet iron, usually three feet long by twenty inches wide, which has beveled sides. Beneath the cover is a coil of perforated pipe, through which the oil makes its escape and is burned. The cover is so arranged that there is always a downward draft, and the force of the flame is continually against the ground. With the Dupee machine it is claimed all that is necessary is to move it from point to point, the miners working right along after it.

If the recent discoveries of oil in Alaska prove true they will greatly facilitate the working of such machines.

CHAPTER VI.

CANADIAN CUSTOMS DUTIES.

As Enacted in 1894.

The Canadian Department of Customs has decided that miners bound for the Klondyke shall pay duty on all supplies brought in from the United States. Each miner will be allowed, however, to take in free 100 pounds of food, his blankets, clothing in use, and cooking utensils. The duties charged, and which we give herein, are the regular customs duties in force throughout the Dominion, as far as supplies for the miner and his family are concerned:

Ale, beer and porter.....	16c. to 24c per gallon
Cider.....	5c. to 10c. per gal.
Lime juice containing less than 25 p. c. proof spirits.....	60c. per gal.
Above 25 p. c. proof spirits.....	20 per cent.
Spirituous or alcoholic liquors of any kind.....	\$2.12½ per gal.
If sweetened or mixed with any in- gredient.....	\$2.12½ and 20 p. c. per gal.
Wines of all kinds.....	25c. per gal. and 3 p. c.
Champagnes, per doz. qts.....	\$3.30
Animals, living.....	20 p. c.
Live hogs.....	1½c. per pound
Meats, salted.....	2c. per lb.
Meats, fresh.....	3c. per lb.
Canned meats, extracts of beef and soups.....	25 p. c.

Poultry and game.....	20 p. c.
Lard.....	2c. per lb.
Soap, common.....	1c. per lb.
Butter.....	4c. per lb.
Cheese.....	3c. per lb.
Eggs.....	5c. per lb.
Condensed milk	3c. per lb.
Condensed coffee	30 p. c.
Apples.....	40c. per barrel
Beans.....	15c. per bushel
Buckwheat.....	10c. per bu.
Potatoes.....	15c. per bu.
Hay.....	\$2 a ton
Vegetables, fresh.....	25 p. c.
Corn.....	7 ¹ / ₂ c. per bu.
Buckwheat meal.....	4c. per lb.
Corn meal.....	40c. per bbl.
Oats.....	10c. per bu.
Oatmeal.....	20 p. c.
Rice, cleaned.....	1 ¹ / ₂ c. per lb.
Wheat.....	15c. per bu.
Wheat flour.....	75c. per bbl.
Biscuits of all kinds.....	25 p. c.
Tomatoes, fresh.....	20c. per bu. and 10 p. c.
Canned vegetables	1 ¹ / ₂ c. per lb.
Pickles.....	35 p. c.
Yeast cakes and baking powder.....	6c. per lb.
Apples, and other fruits, dried or evap....	25 p. c.
Oranges, lemons or limes.....	25c. per box
Canned fruits.....	2c. per lb.
Brandied fruits.....	\$1.90 per gal.
Jellies, jams and preserves.....	3c. per lb.
Tea and green coffee.....	10 p. c.
Coffee, roasted or ground, and all imitations	
.....	2c. per lb.
Extract of coffee.....	3c. per lb.

Cocoa and chocolate.....	20 p. c.
Spices, ground.....	25 p. c.
Playing cards.....	6c. per pack
Earthenware and stoneware.....	3c. per gal.
Glass goods.....	30 p. c.
Fur clothes and caps.....	25 p. c.
All manufactures of leather.....	25 p. c.
Harness and saddlery.....	30 p. c.
Boots and shoes.....	25 p. c.
India rubber boots.....	25 to 30 p. c.
India rubber clothing.....	35 p. c.
Skates.....	10c. per pair and 30 p. c.
Cutlery.....	25 p. c.
Picks and similar tools.....	35 p. c.
Axes of all kinds.....	35 p. c.
Shovels and spades.....	50c. per doz. and 25 p. c.
Sewing machines.....	30 p. c.
Type for printing.....	20 p. c.
Printing presses.....	10 p. c.
Wire of all kinds.....	25 p. c.
Firearms.....	20 p. c.
Stamped tinware, galvanized ironware...	25 p. c.
Enameled ironware and tinware.....	35 p. c.
Watches.....	25 p. c.
Salt.....	7½c. per 100 lbs.
Lumber and timber, manufactured.....	20 p. c.
Fishing rods.....	30 p. c.
Coffins and caskets.....	25 p. c.
Wagons.....	25 p. c.
Bicycles.....	30 p. c.
Musical instruments.....	25 p. c.
Sugar.....	8½c. per lb.
Syrups and molasses.....	½c. per lb.
Cordage.....	1c. per lb. and 10 p. c.
Canvas for sails or tents.....	5 p. c.
Sails already made.....	25 p. c.

Fabrics wholly or partly of wool.....	30 p. c.
Felt.....	17½ p. c.
Socks and stockings.....	10c. per doz. pair and 35 p. c.
Gloves and mitts.....	35 p. c.
Hats, caps and bonnets.....	30 p. c.
Surgical belts and trusses.....	25 p. c.
Antiseptic surgical dressing	20 p. c.
Cigars and cigarettes....	\$2.00 per lb. and 25 p. c.
Manufactured tobacco...35c. per lb. and	12½ p. c.
Cut tobacco.....	45c. per lb. and 12½ p. c.
Cartridges.....	30 p. c.
Blasting and mining powder.....	2c. per lb.
Ordinary powder.....	3c. per lb.
Tobacco pipes.....	35 p. c.
Ships and other vessels.....	10 p. c.

A Huge Enterprise.

Chicago prospectors will dredge the Yukon River for gold, and as soon as a few minor details can be arranged the novel expedition will depart for the Northwest Territory.

A dredge costing \$65,000 has been constructed especially for the above purpose. It was tested as to its strength and feasibility at the four-mile crib, on Lake Michigan, and proved satisfactory. When the Yukon is reached scows will be built by the carpenters, after which the actual work of dredging the bed of the great river for gold will commence.

CHAPTER VII.

GENERAL INFORMATION ABOUT GOLD AND SILVER PRODUCTION.

Gold Production in America—1896.

Activity in the old mining regions of California and other States and the increased production of Cripple Creek and of some minor districts in Colorado, with improvements in several other States and in Alaska, carried the gold production up to \$58,660,726, showing an increase of \$11,830,927 over 1895. The gain was not the result of new discoveries, which were few in number and generally of slight importance; it came rather from more extensive and better working of old mines, and from increased skill and care in treating the ores. The districts which attracted most attention during the year were Cripple Creek, in Colorado; the new Randsburg Mining District, in Southern California; the Mercur District, in Utah; the De la Mar Mines, in Nevada, and the Mines of Alaska. In the latter there many reports of new mines and a number of men went to the Yukon placers, on Canadian territory, but their success has only very recently proven substantial and astonishingly promising.

The Decrease of Silver Value.

Silver is one of the great products of the United States, and whatever one's views may be

upon silver coinage, its decline as a product is to be regretted, the same as if it were any other domestic product.

The latest report of the Director of the U. S. mint as our authority, we find that the silver of this country mined in 1895 was \$72,051,000; of the world, \$217,610,800, and of all Europe, \$22,210,400. Europe has no interest, practically, in maintaining the market value of silver, except as those countries may have a large stock on hand. As a product it belongs almost wholly to America, and, to be more exact, the Pacific coast, beginning with Chili and extending in an almost unbroken chain northward. The product of the world, in kilograms, was 5,238,059 in 1895, and the world's industrial consumption of silver for the year was 1,995,863 kilograms, more than one-third of the total product. This country alone could easily supply the industrial demand. The commercial value, the silver of this country produced in 1895 is set down as \$30,254,296, and from the standpoint of exportation of silver stands out still more prominently. Our exports of wheat, even, aggregated last year \$43,805,666, and corn \$14,650,767. Silver, coin value, was \$47,227,317 in 1895 and \$59,862,956 in 1896.

Cripple Creek District.

The vicinity of Cripple Creek and Victor, where such excitement arose in 1895-96, continues to deserve the full attention of mining experts. The production of 1896 has been over \$12,000,000, and it goes on steadily sending from one million to one million and a quarter of the precious metal per month, to the Denver U. S. Assaying

office. Money, however, is necessary to do any profitable mining around the Creek as it is nearly always by shaft sinking or tunneling that the veins are reached. Still the Cripple Creek district contains many attractive propositions yet.

The History of Nuggets.

Here is the *Century Dictionary's* definition of a **Nugget**: One of the larger lumps of native gold found in alluvial deposits or placer mines.

The \$42,000 nugget said to have been discovered in August, 1897, by the Graves brothers in their placer mine at Coffey Creek, Trinity Co., California, bids fair to count as one of the largest finds in the history of nuggets.

Until then the finest of California nuggets was that found by Oliver Martin. It weighed 151 pounds and six ounces. Martin and a companion named Flower were camped in a canon when a terrible rainstorm came on, quickly swelling the stream. Flower was drowned, but Martin escaped. While trying to bury his companion's body by the roots of a tree, Martin discovered the great lump of gold and quartz worth \$20,000.

In Sierra Co., in 1869, the five partners in the Monumental claim discovered a nugget which weighed 1,593 ounces. They sold it for \$21,637 for exhibition purposes. Later it was melted, realizing \$17,655. A still more valuable nugget was found in 1850 in the same county. It was valued at \$23,000.

Other large nuggets were discovered in Calaveras Co., Cal., in 1854. One weighed 118 pounds; another, 149 pounds.

The largest nugget ever discovered in Siberia weighed 96 pounds 4 ounces. The heaviest nugget of gold ever found in the world was that found in Australia in 1852. It weighed 223 lbs. and was known as the "Water Moon" Nugget.

FULL TEXT OF UNITED STATES LAWS NOW IN FORCE.

The text is taken from the last edition of the "Revised Statutes of the United States," 1878, and the Supplement including the Session of 1891.

Commonly called the "Mining Acts," with all their amendments, and miscellaneous sections from other Acts.

TITLE XIII, CHAPTER SEVENTEEN.

Possessory Actions.—§ 910.—No possessory action between persons, in any court of the United States, for the recovery of any mining title, or for damages to any such title, shall be affected by the fact that the paramount title to the land in which such mines lie is in the United States; but each case shall be adjudged by the law of possession.

TITLE XXII, CHAPTER SIX ENTITLED "MINERAL LANDS AND MINING RESOURCES."

Reserved from Sale under the Pre-emption Acts.—§ 2318.—In all cases lands valuable for minerals shall be reserved from sale, except as otherwise expressly directed by law.

General License.—§ 2319.—All valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, are

hereby declared to be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase
District by citizens of the United States and
Rules. those who have declared their intention to become such, under regulations prescribed by law, and according to the local customs or rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States.

Length of Claims.—§ 2320.—Mining claims upon veins or lodes of quartz or other rock in place bearing gold, silver, cinnabar, lead, tin, copper, or other valuable deposits, heretofore located, shall be governed as to length along the vein or lode by the customs, regulations, and laws in force at the date of
Discovery their location. A mining claim located after the tenth day of May, eighteen hundred and seventy-two, whether located by one or more persons, may equal, but shall not exceed, one thousand five hundred feet in length along the vein or lode; but no location of a mining claim shall be made until the discovery of the vein or lode within the limits of the claim located. No claim shall extend more
Width of than three hundred feet on each side
Claims. of the middle of the vein at the surface, nor shall any claim be limited by any mining regulation to less than twenty-five feet on each side of the middle of the vein at the surface, except where adverse rights existing on the tenth day of May, eighteen hundred and seventy-two, render such limitation necessary.

The end lines of each claim shall be parallel to each other.

Proof of Citizenship.—§ 2321.—Proof of citizenship, under this chapter, may consist, in the case of an individual, of his own affidavit thereof; in the case of an association of persons unincorporated, of the affidavit of their authorized agent, made on his own knowledge, or upon information and belief; and in the case of a corporation organized under the laws of the United States, or of any State or Territory thereof, by the filing of a certified copy of their charter or certificate of incorporation.

Surface.—Dip and Side Veins.—§ 2322.—The locators of all mining locations heretofore made or which shall hereafter be made, on any mineral vein, lode, or ledge, situated on the public domain, their heirs and assigns, where no adverse claim exists on the tenth day of May, eighteen hundred and seventy-two, so long as they comply with the laws of the United States, and with State, Territorial, and local regulations not in conflict with the laws of the United States governing their possessory title, shall have the exclusive right of possession and enjoyment of all the surface included within the

Top or Apex Controls. lines of their locations, and of all veins, lodes, and ledges throughout their entire depth, the top or apex of which lies inside of such surface lines extended downward vertically, although such veins, lodes, or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side lines of such surface

Steaming up the Yukon.



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locations. But their right of possession to such outside parts of such veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward as above described, through the end lines of their locations,

so continued in their own direction

Surface. that such planes will intersect such exterior parts of such veins or ledges.

And nothing in this section shall authorize the locator or possessor of a vein or lode which extends in its downward course between the vertical lines of his claim to enter upon the surface of a claim owned or possessed by another.

Tunnels.—§ 2323.—Where a tunnel is run for the development of a vein or lode, or for the discovery of mines, the owners of such tunnel shall have the right of possession of all veins or lodes within three thousand feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface; and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel, and while the same is being prosecuted with reasonable diligence, shall be invalid; but failure to prosecute the work on the tunnel for six months shall be considered as an abandonment of the right to all undiscovered veins on the line of such tunnel.

District Rules.—§ 2324.—The miners of such mining district may make regulations not in conflict with the laws of the United States, or with the laws of the State or Territory in which the

district is situated, governing the location, manner of recording, amount of work necessary to hold possession of a mining claim, subject to the following requirements: The location must be distinctly marked on the ground, so that its boundaries can be readily traced. All records of mining claims hereafter made shall contain the name or names of the locators, the date of the location, and such a description of the claim or Annual claims, located by reference to some Labor. natural object or permanent monument as will identify the claim. On each claim located after the tenth day of May, eighteen hundred and seventy-two, and until a patent has been issued therefor, not less than one hundred dollars' worth of labor shall be performed or improvements made during each year. On all claims located prior to the tenth day of May, eighteen hundred and seventy-two, ten dollars' worth of labor shall be performed, or improvements made by the tenth day of June, eighteen hundred and seventy-four, and each year thereafter, for each one hundred feet in length along the vein, until a patent has been issued therefor; but where such claims are held in common, such expenditure may be made upon any one claim; and upon a failure to comply with these conditions, the claim or mine upon which such failure occurred shall be open to relocation in the same manner as if no location of the same had ever been made, provided that the original locators, their heirs, assigns, or legal representatives, have not resumed work upon the claim after failure and before such location. Upon the failure of any

one of several co-owners to contribute his proportion of the expenditures required hereby, the co-owners who have performed the labor or made the improvements may, at the expiration of the year, give such delinquent co-owner personal notice in writing or notice by publication in the newspaper published nearest the claim, for at least once a week for ninety days, and if at the expiration of ninety days after such notice in writing or by publication such delinquent should fail or refuse to contribute his proportion of the expenditure required by this section, his interest in the claim shall become the property of his co-owners who have made the required expenditures.

Amendment of 1875—Labor by Tunnel.—That section two thousand three hundred and twenty-four of the Revised Statutes, be, and the same is hereby, amended so that where a person or company has or may run a tunnel for the purposes of developing a lode or lodes, owned by said person or company, the money so expended in said tunnel shall be taken and considered as expended on said lode or lodes, whether located prior to or since the passage of said act; and such person or company shall not be required to perform work on the surface of said lode or lodes in order to hold the same as required by said act.

Amendment of 1880—Annual Labor Period Fixed.—That section twenty-three hundred and twenty-four of the Revised Statutes of the United States be amended by adding the following words: "*Provided*, That the period within which the work required to be done annually on

all unpatented mineral claims, shall commence on the first day of January succeeding the date of location of such claim, and this section shall apply to all claims located since the tenth day of May, Anno Domini eighteen hundred and seventy-two."

Application for Patent.—§ 2555.—A patent for any land claimed and located for valuable deposits may be obtained in the following manner: Any person, association, or corporation authorized to locate a claim under this chapter, having claimed and located a piece of land for such purposes, who has, or have, complied with the terms of this chapter, may file in the proper land office, an application for a patent, under oath, showing such compliance, together with a plat and field notes of the claim or claims in common, made by or under the direction of the United States surveyor-general, showing accurately the boundaries of the claim or claims, which shall be distinctly marked by monuments on the ground, and shall post a copy of such plat, together with a notice of such application for a patent, in a conspicuous place on the land embraced in such plat previous to the filing of the application for a patent, and shall file an affidavit of at least two persons that such notice has been duly posted, and shall file a copy of the notice in such land office, and shall thereupon be entitled to a patent for the land, in the manner following: The register of the land office, upon the filing of such application, plat, field notes, notices and affidavits, shall publish a notice that such application has been made, for the period of sixty days, in a newspaper to be

by him designated as published nearest to such claim; and he shall also post such notice in his office for the same period. The claimant at the time of filing this application, or at any time hereafter, within the sixty days of publication,

\$500 Improvements.

shall file with the register a certificate of the United States surveyor-general that five hundred dollars' worth of labor has been expended or improvements made upon the claim by himself or grantors; that the plat is correct, with such further description by such reference to natural objects or permanent monuments as shall identify the claim, and furnish an accurate description, to be incorporated in the patent. At the expiration of the sixty days of publication the claimant shall file his affidavit, showing that the plat and notice have been posted in a conspicuous place on the claim during such period of publication. If no adverse claim

Adverse Claim.

shall have been filed with the register and the receiver of the proper land office at the expiration of the sixty

days of publication, it shall be assumed that the applicant is entitled to a patent, upon the payment to the proper officer of five dollars per acre, and that no adverse claim exists; and

\$5 per Acre.

thereafter no objection from third parties to the issuance of a patent shall be heard, except it be shown that the applicant has failed to comply with the terms of this chapter.

Amendment of 1890.—Applications by Non-Residents.—That section twenty-three hundred and twenty-five of the Revised Statutes of the United States be amended by adding

thereto the following words: "*Provided*, That where the claimant for a patent is not a resident of or within the land district wherein the vein, lode, ledge, or deposit sought to be patented is located, the application for patent and the affidavits required to be made in this section by the claimant for such patent may be made by his, her, or its authorized agent, where said agent is conversant with the facts sought to be established by said affidavits: *And provided*, That this section shall apply to all applications now pending for patents to mineral lands."

Adverse Claims. — §2326. — Where an adverse claim is filed during the period of publication, it shall be upon oath of the person or persons making the same, and shall show the nature, boundaries, and extent of such adverse claim, and all proceedings, except the publication of notice and making and filing of the affidavit thereof, shall be stayed until the controversy shall have been

settled or decided by a court of

Suit Supporting competent jurisdiction, or the
in 30 Days. adverse claim waived. It shall

be the duty of the adverse

claimant, within thirty days after filing his claim, to commence proceedings in a court of competent jurisdiction, to determine the question of the right of possession, and prosecute the same with reasonable diligence to final judgment; and a failure so to do shall be a waiver of his adverse claim. After such judgment shall have been rendered, the party entitled to the possession of the claim, or any portion thereof, may, without giving further notice, file a certified copy of the judgment roll with the register of the land office,

Proceedings after Judgment. together with the certificate of the surveyor-general, that the requisite amount of labor has been expended or improve-

ments made thereon, and the description required in other cases, and shall pay to the receiver five dollars per acre for his claim, together with the proper fees, whereupon the whole proceedings and the judgment roll shall be certified by the register to the Commissioner of the General Land Office, and a patent shall issue thereon for the claim, or such portion thereof as the applicant shall appear, from the decision of the court, to rightly possess. If it appears from the decision of the court that several parties are entitled to separate and different portions of the claim, each party may pay for his portion of the claim, with the proper fees, and file the certificate and description by the surveyor-general, whereupon the register shall certify the proceedings and judgment roll to the Commissioner of the General Land Office, as in the preceding case, and patents shall issue to the several parties according to their respective rights. Nothing herein contained shall be construed to prevent the alienation of the title conveyed by a patent for a mining claim to any person whatever.

Amendment of 1881.—Title in Neither Party.—That if, in any action brought pursuant to section twenty-three hundred and twenty-six of the Revised Statutes, title to the ground in controversy shall not be established by either party, the jury shall so find, and judgment shall be entered according to the verdict. In such case costs shall not be allowed to either party, and the claimant shall not proceed in the land

Junction of Forty Mile and Yukon Rivers.



office or be entitled to a patent for the ground in controversy until he shall have perfected his title.

Amendments of 1892.—Adverse by Agent for Non-Residents.—That the adverse claim required by section twenty-three hundred and twenty-six of the Revised Statutes may be verified by the oath of any duly authorized agent or attorney-in-fact of the adverse claimant cognizant of the facts stated; and the adverse claimant, if residing or at the time being beyond the limits of the district wherein the claim is situated may make oath to the adverse claim before the clerk of any court of record of the United States or of the State or Territory where the adverse claimant may then be, or before any notary public of such State or Territory.

Idem.—Affidavits Out of Land District.—That applicants for mineral patents, if residing beyond the limits of the district wherein the claim is situated, may make any oath or affidavit required for proof of citizenship before the clerk of any court of record or before any notary public of any State or Territory.

Survey.—§ 2327.—The description of vein or lode claims, upon surveyed lands, shall designate the location of the claim with reference to the lines of the public surveys, but need not conform therewith; but where a patent shall be issued for claims upon unsurveyed lands, the surveyor-general, in extending the surveys, shall adjust the same to the boundaries of such patented claim, according to the plat or description thereof, but so as in no case to interfere with or change the location of any such patented claim.

Previous Applications.—§ 2328.—Applications for patents for mining claims under former laws now pending may be prosecuted to a final decision in the General Land Office; but in such cases where **Adverse Rights Excepted.** adverse rights are not affected thereby, patents may issue in pursuance of the provisions of this chapter; and all patents for mining claims upon veins or lodes heretofore issued shall convey all the rights and privileges conferred by this chapter where no adverse rights existed on the tenth day of May, eighteen hundred and seventy-two.

Placers Open to Entry.—§ 2329.—Claims usually called "placers," including all forms of deposit, excepting veins of quartz, or other rock in place, shall be subject to entry and patent, under like circumstances and conditions, and upon similar proceedings, as are provided for vein or lode claims; but where the lands have been previously surveyed by the United States, the entry in its exterior limits shall conform to the legal subdivisions of the public lands.

Legal Subdivision of Placers.—§ 2330.—Legal subdivisions of forty acres may be subdivided into ten-acre tracts; and two or more persons, or associations of persons, having contiguous claims of any size, although such claims may be less than ten acres each, may make joint entry thereof; but no location of a placer claim, made after the ninth day of July, eighteen hundred and seventy, shall exceed
160-Acre Placers. one hundred and sixty acres for any one person or association of persons, which location shall conform to the

United States surveys; and nothing in this section contained shall defeat or impair any bona fide pre-emption or homestead claim upon agricultural lands, or authorize the sale of the improvements of any bona fide settler to any purchaser.

Placers on Surveyed Lands.—§ 2331.—

Where placer claims are upon surveyed lands, and conform to legal subdivisions, no further survey or plat shall be required, and all placer mining claims located after the tenth day of May, eighteen hundred and seventy-two, shall conform as near as practicable with the United States system of public land surveys, and the rectangular subdivisions of such surveys, and no such location shall include more than twenty acres for each individual claimant; but where placer claims cannot be conformed to legal subdivisions, survey and plat shall be made as on unsurveyed lands; and where by the segregation of mineral land in any legal subdivision a quantity of agricultural land less than forty acres remains, such fractional portion of agricultural land may be entered by any party qualified by law, for homestead or pre-emption purposes.

Limitations.—§ 2332.—Where such person or association, they and their grantors, have held and worked their claims for a period equal to the time prescribed by the statute of limitations for mining claims of the State or Territory where the same may be situated, evidence of

Liens. such possession and working of the claims for such period shall be sufficient to establish a right to a patent thereto

under this chapter, in the absence of any adverse claim; but nothing in this chapter shall be deemed to impair any lien which may have attached in any way whatever to any mining claim or property thereto attached prior to the issuance of a patent.

Placer Claim Containing Lode.—§ 2333.—

Where the same person, association, or corporation is in possession of a placer claim, and also a vein or lode included within the boundaries thereof, application shall be made for a patent for the placer claim, with the statement that it includes such vein or lode, and in such case a patent shall issue for the placer claim, subject to the provisions of this chapter, including such vein or lode, upon the payment of five dollars per acre for such vein or lode claim, and twenty-five feet of surface on each side thereof. The remainder of the placer claim, or any placer claim not embracing any vein or

Placers \$2.50 lode claim, shall be paid for at the
per acre. rate of two dollars and fifty cents
 per acre, together with all costs

of proceedings; and where a vein or lode, such as is described in section twenty-three hundred and twenty, is known to exist within the boundaries of a placer claim, an application for a patent for such placer claim which does not include an application for the vein or lode claim shall be construed as a conclusive declaration that the claimant of the placer claim has no right of possession of the vein or lode claim; but where the existence of a vein or lode in a placer claim is not known, a patent for the placer claim shall convey all valuable minerals and other deposits within the boundaries thereof.

Deputy Surveyor and Fees.—§ 2334.—The surveyor-general of the United States may appoint in each land district containing mineral lands as many competent surveyors as shall apply for appointment to survey mining claims. The expenses of the survey of vein or lode claims, and the survey and subdivision of placer claims into smaller quantities than one hundred and sixty acres, together with the cost of publication of notices, shall be paid by the applicants, and they shall be at liberty to obtain the same at the most reasonable rates, and they shall also be at liberty to employ any United States deputy surveyor to make the survey.

The Commissioner of the General Land Office shall also have power **Charges for Publication.** to establish the maximum charges for surveys and publication of notices under this chapter; and, in case of excessive charges for publication, he may designate any newspaper published in a land district where mines are situated for the publication of mining notices in such district, and fix the rates to be charged by such paper; and, to the end that the Commissioner may be fully informed on the subject, each applicant shall file with the register a sworn statement of all charges and fees paid by such applicant for publication and surveys, together with all fees and money paid the register and the receiver of the land office, which statement shall be transmitted, with the other papers in the case, to the Commissioner of the General Land Office.

Affidavits and Proofs.—§ 2335.—All affidavits required to be made under this chapter may be verified before any officer authorized to admin-

ister oaths within the land district where the claims may be situated, and all testimony and proofs may be taken before any such officer, and, when duly certified by the officer taking the same, shall have the same force and effect as if taken before the register and receiver of the land office. In cases of contest as to the mineral

or agricultural character of land, **Agricultural** the testimony and proofs may be
Contest. taken as herein provided on personal notice of at least ten days to the opposing party; or if such party cannot be found, then by publication of at least once a week for thirty days in a newspaper, to be designated by the register of the land office as published nearest to the location of such land; and the register shall require proof that such notice has been given.

Cross Veins.—§ 2336.—Where two or more veins intersect or cross each other, priority of title shall govern, and such prior location shall be entitled to all ore or mineral contained within the space of intersection; but the subsequent location shall have the right of
Veins Unitting way through the space of inter-
on the Dip. section for the purpose of the convenient working of the mine.

And where two or more veins unite, the oldest of prior location shall take the vein below the point of union, including all the space of intersection.

Mill Sites.—§ 2337.—Where non-mineral land not contiguous to the vein or lode is used or occupied by the proprietor of such vein or lode for mining or milling purposes, such non-adjacent surface ground may be embraced and

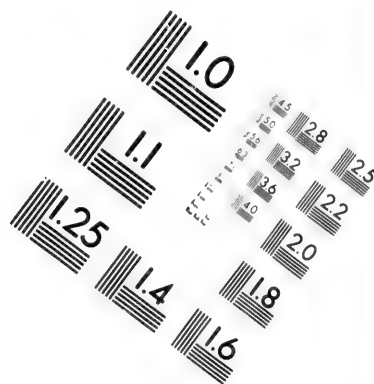
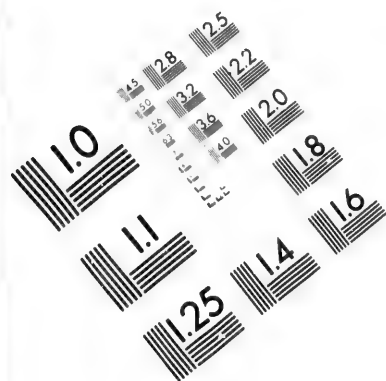
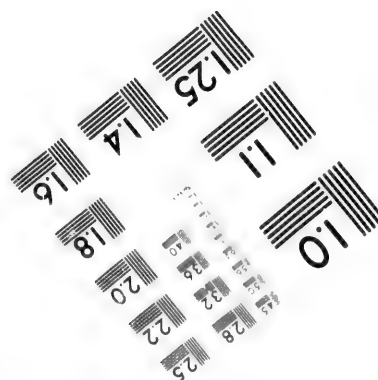
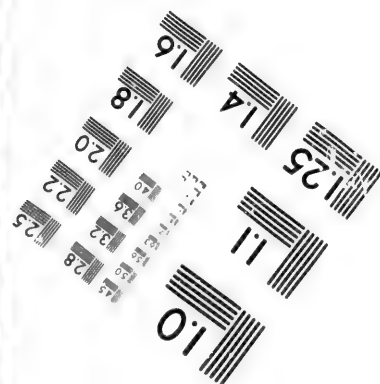
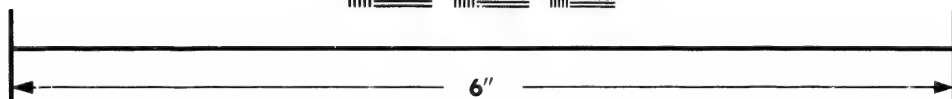
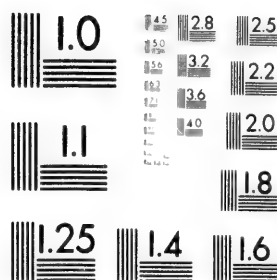


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Included in an application for a patent for such vein or lode, and the same may be patented therewith, subject to the same preliminary requirements as to survey and notice as are applicable to veins or lodes; but no location hereafter made of such non-adjacent land shall exceed five acres, and payment for the same must be made at the same rate as fixed by this chapter for the superfcies of the lode. The owner of a quartz mill or reduction works not owning a mine in connection therewith, may also receive a patent for his mill site, as provided in this section.

Easements.—§ 2338.—As a condition of sale, in the absence of necessary legislation by Congress, the local legislature of any State or Territory may provide rules for working mines, involving easements, drainage, and other necessary means to their complete development; and those conditions shall be fully expressed in the patent.

Water Rights. — Appropriation.—§ 2339.—Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public

domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage.

Patents Subject to Water Easements.—

§ 2340.—All patents granted, or pre-emption or homesteads allowed, shall be subject to any vested and accrued water rights, or rights to ditches and reservoirs used in connection with such water rights, as may have been acquired under or recognized by the preceding section.

Homesteads.—§ 2341.—Wherever, upon the lands heretofore designated as mineral lands, which have been excluded from survey and sale, there have been homesteads made by citizens of the United States, or persons who have declared their intention to become citizens, which homesteads have been made, improved, and used for agricultural purposes, and upon which there have been no valuable mines of gold, silver, cinabar, or copper discovered, and which are properly agricultural lands, the settlers or owners of such homesteads shall have a right of pre-emption thereto, and shall be entitled to purchase the same at the price of one dollar and twenty-five cents per acre, and in quantity not to exceed one hundred and sixty acres; or they may avail themselves of the provisions of chapter five of this Title, relating to "HOMESTEADS."

Segregation of Agricultural Lands.—

§ 2342.—Upon the survey of the lands described in the preceding section, the Secretary of the Interior may designate and set apart such portions of the same as are clearly agricultural lands, which lands shall thereafter be subject to pre-emption and sale as other public lands, and be

subject to all the laws and regulations applicable to the same.

Land Districts. — § 2343.—The President is authorized to establish additional land districts, and to appoint the necessary officers under existing laws, wherever he may deem the same necessary for the public convenience in executing the provisions of this chapter.

Vested Rights. — § 2344.—Nothing contained in this chapter shall be construed to impair, in any way, rights or interests in mining property acquired under existing laws; nor to affect the provisions of the act entitled "An act granting to A. Sutro the right of way and other privileges to aid in the construction of a draining and exploring tunnel to the Comstock lode, in the State of Nevada," approved July twenty-five, eighteen hundred and sixty-six. «

§ 2345.—Excepts Michigan, Wisconsin and Minnesota.*

State and Railroad Grants. — § 2346.—No act passed at the first session of the Thirty-eighth Congress, granting lands to States or corporations to aid in the construction of roads or for other purposes, or to extend the time of grants made prior to the thirtieth day of January, eighteen hundred and sixty-five, shall be so construed as to embrace mineral lands, which in all cases are reserved exclusively to the United States, unless otherwise specially provided in the act or acts making the grant.

As to lands on Military Reservations, see Act of July 5, 1884.

*By Act of May 5, 1876, Missouri and Kansas are excepted from the operation of the Mining Act. By Act of March 3, 1883, Alabama is excepted.

LAND OFFICE RULES, REVISED DECEMBER 10, 1891.

Re-Issued by the General Land Office,
December 1, 1894.

MINERAL LANDS OPEN TO EXPLORATION, OCCUPATION AND PURCHASE.

1. It will be perceived that by the foregoing provisions of law the mineral lands in the public domain, surveyed or unsurveyed, are open to exploration, occupation, and purchase by all citizens or the United States and all those who have declared their intention to become such.

2. **Status of Lode Claims Located Prior to May 10, 1872.**—By an examination of the several sections of the Revised Statutes it will be seen that the *status* of lode claims located *previous* to the 10th May, 1872, is not changed with regard to their *extent along the lode or width of surface*.

3. **Side Veins, Additional Grant of.**—Mining rights acquired under such previous locations are, however, enlarged by such Revised Statutes in the following respect, viz.: The locators of all such previously taken veins or lodes, their heirs and assigns, so long as they comply with the laws of Congress and with State, Territorial, or local regulations not in conflict therewith,

governing mining claims, are invested with the exclusive possessory right of all the surface included within the lines of their locations, and of all veins, lodes, or ledges throughout their entire depth, the top or apex of which lies inside of such surface lines extended downward vertically, although such veins, lodes, or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side lines of such locations at the surface, it being expressly provided, however, that the right of possession to such outside parts of said veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward, as aforesaid, through the end lines of their locations so continued in their own direction that such planes will intersect such exterior parts of such veins, lodes, or ledges; no right being granted, however, to the claimant of such outside portion of a vein or ledge to enter upon the surface location of another claimant.

4. *Idem.*—It is to be distinctly understood, however, that the law limits the possessory right to veins, lodes, or ledges, *other than* the one named in the original location, to such as were not *adversely claimed on May 10, 1872*, and that where such other vein or ledge was so adversely claimed at that date, the right of the party so adversely claiming is in no way impaired by the provisions of the Revised Statutes.

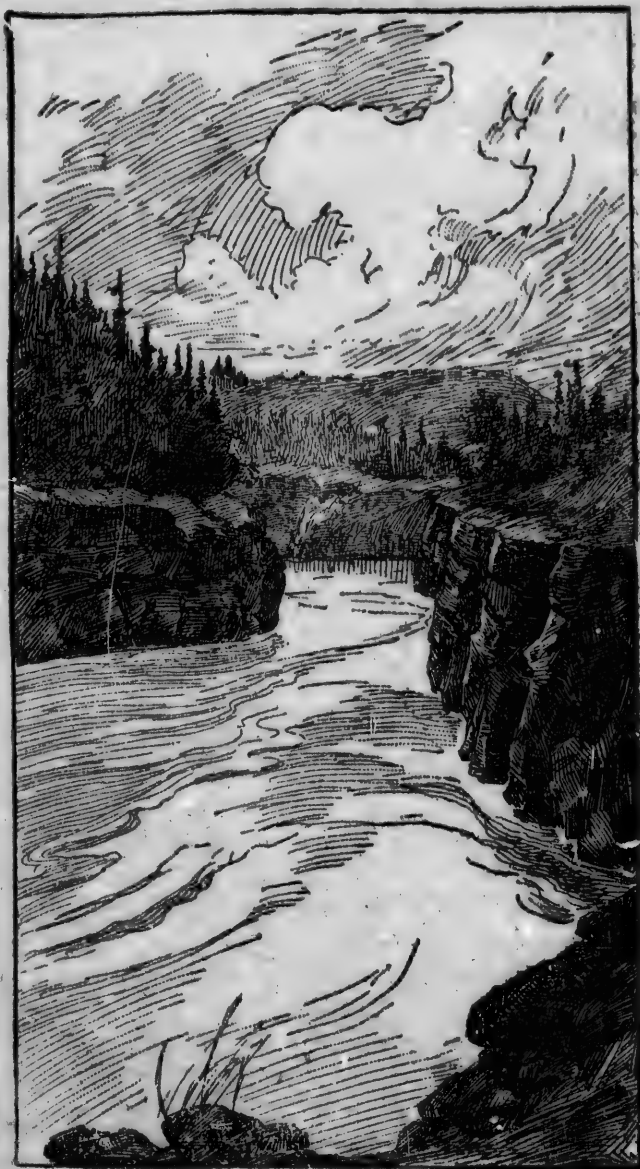
5. *Annual Labor on Old Locations.*—In order to hold the possessory title to a mining claim located prior to May 10, 1872, and for which a patent has not been issued, the law requires that *ten dollars* shall be expended annu-

ally in labor or improvements on each claim of *one hundred feet* on the course of the vein or lode until a patent shall have been issued therefor; but where a number of such claims are held in common upon the same vein or lode, the aggregate expenditure that would be necessary to hold all the claims, at the rate of ten dollars per hundred feet, may be made upon any one claim; a failure to comply with this requirement in any one year subjecting the claim upon which such failure occurred to re-location by other parties, the same as if no previous location thereof had ever been made, unless the claimants under the original location shall have resumed work thereon after such failure and before such re-location. The first annual expenditure upon claims of this class should have been performed subsequent to May 10, 1872, and prior to January 1, 1875. From and after January 1, 1875, the required amount must be expended *annually* until patent issues. By decision of the honorable Secretary of the Interior, dated March 4, 1879, such annual expenditures are not required subsequent to entry, the date of issuing the patent certificate being the date contemplated by statute.

6. Forfeiture.—Upon the failure of any one of several co-owners of a vein, lode, or ledge, which has not been entered, to contribute his proportion of the expenditures necessary to hold the claim or claims so held in ownership in common, the co-owners, who have performed the labor or made the improvements as required by said Revised Statutes, may, at the expiration of the year, give such delinquent co-owner personal notice in writing, or notice by publication

in the newspaper published nearest the claim for at least once a week for ninety days; and if upon the expiration of ninety days after such notice in writing, or upon the expiration of one hundred and eighty days after the first newspaper publication of notice, the delinquent co-owner shall have failed to contribute his proportion to meet such expenditures or improvements, his interest in the claim by law passes to his co-owners who have made the expenditures or improvements as aforesaid. Where a claimant alleges ownership of a forfeited interest under the foregoing provision, the sworn statement of the publisher as to the facts of publication, giving dates and a printed copy of the notice published, should be furnished, and the claimant must swear that the delinquent co-owner failed to contribute his proper proportion within the period fixed by the statute.

7. Patents for Veins or Lodes Heretofore Issued.—Rights under patents for veins or lodes heretofore granted under previous legislation of Congress are enlarged by the Revised Statutes so as to invest the patentee, his heirs or assigns, with title to all veins, lodes, or ledges throughout their entire depth, the top or apex of which lies within the end and side boundary lines of his claim on the surface, as patented, extended downward vertically, although such veins, lodes, or ledges may so far depart from a perpendicular in their course downward as to extend outside the vertical side lines of the claim at the surface. The right of possession to such outside parts of such veins or ledges to be confined to such portions thereof as lie between vertical planes drawn downward through the end lines of the



Between the Lakes.

claims at the surface, so continued in their own direction that such planes will intersect such exterior parts of such veins or ledges; it being expressly provided, however, that all veins, lodes, or ledges, the top or apex of which lies inside such surface locations, *other* than the one named in the patent, which were *adversely claimed on the 10th May, 1872*, are excluded from such conveyance by patent.

8. Applications for patents for mining claims pending at the date of the Act of May 10, 1872, may be prosecuted to final decision in the General Land Office, and where no adverse rights are affected thereby, patents will be issued in pursuance of the provisions of the Revised Statutes.

**MANNER OF LOCATING CLAIMS ON VEINS OR LODES
AFTER MAY 10, 1872.**

9. Length of Claim.—From and after the 10th May, 1872, any person who is a citizen of the United States, or who has declared his intention to become a citizen, may locate, record, and hold a mining claim of *fifteen hundred linear feet* along the course of any mineral vein or lode subject to location; or an association of persons, severally qualified as above, may make joint location of such claim of *fifteen hundred feet*, but in no event can a location of a vein or lode made subsequent to May 10, 1872, exceed fifteen hundred feet along the course thereof, whatever may be the number of persons composing the association.

10. Width, Surface Ground.—With regard to the extent of surface ground adjoining a vein or lode, and claimed for the convenient working thereof, the Revised Statutes provide that the

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lateral extent of locations of veins or lodes made after May 10, 1872, shall in no case *exceed three hundred feet on each side of the middle of the vein at the surface*, and that no such surface rights shall be limited by any mining regulations to less than twenty-five feet on each side of the middle of the vein at the surface, except where adverse rights existing on the 10th May, 1872, may render such limitation necessary; the end lines of such claims to be in all cases parallel to each other. Said lateral measurements cannot extend beyond three hundred feet on *either* side of the middle of the vein at the surface, or such distance as is allowed by local laws. For example: 400 feet cannot be taken on one side and 200 feet on the other. If, however, 300 feet on each side are allowed, and by reason of prior claims but 100 feet can be taken on one side, the locator will not be restricted to less than 300 feet on the other side; and when the locator does not determine by exploration *where* the middle of the vein at the surface is, his discovery shaft must be assumed to mark such point.

11. Size of Claim.—By the foregoing it will be perceived that no lode claim located after the 10th May, 1872, can exceed a parallelogram fifteen hundred feet in length by six hundred feet in width, but whether surface ground of that width can be taken, depends upon the local regulations or State or Territorial laws in force in the several mining districts; and that no such local regulations or State or Territorial laws shall limit a vein or lode claim to less than fifteen hundred feet along the course thereof, whether the location is made by one or more persons, nor can surface rights be limited to less than fifty

feet in width, unless adverse claims existing on the 10th day of May, 1872, render such lateral limitation necessary.

12. District Rules.—It is provided by the Revised Statutes that the miners of each district may make rules and regulations not in conflict with the laws of the United States, or of the State or Territory in which such districts are respectively situated, governing the location, manner of recording, and amount of work necessary to hold possession of a claim. They likewise require that the location shall be so distinctly marked on the ground that its boundaries may be readily traced. This is a very important matter, and locators cannot exercise too much care in defining their locations at the outset, inasmuch as the law requires that all records of mining locations made subsequent to May 10, 1872, shall contain the name or names of the locators, the date of the location, and such a *description of the claim or claims* located, by reference to some natural object or permanent monument, as will identify the claim.

13. No Record Before Discovery.—The statutes provide that no lode claim shall be recorded until after the discovery of a vein or lode within the limits of the claim located, the object of which provision is evidently to prevent the appropriation of presumed mineral ground for speculative purposes to the exclusion of *bona fide* prospectors, before sufficient work has been done to determine whether a vein or lode really exists,

14. Location Notice.—The claimant should, therefore, prior to locating his claim, unless the

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vein can be traced upon the surface, sink a shaft, or run a tunnel or drift, to a sufficient depth therein to discover and develop a mineral bearing vein, lode, or crevice; should determine, if possible, the general course of such vein in either direction from the point of discovery, by which direction he will be governed in making the boundaries of his claim on the surface. His location notice should give the course and distance as nearly as practicable from the discovery shaft on the claim, to some permanent, well known points or objects, such, for instance, as stone monuments, blazed trees, the confluence of streams, point of intersection of well known gulches, ravines, or roads, prominent buttes, hills, etc., which may be in the immediate vicinity, and which will serve to perpetuate and fix the *locus* of the claim and render it susceptible of identification from the description thereof given in the record of locations in the district, and should be duly recorded.

15. Adjoining Claims.—Staking.—In addition to the foregoing data, the claimant should state the names of adjoining claims, or, if none adjoin, the relative positions of the nearest claims; should drive a post or erect a monument of stones at each corner of his surface ground, and at the point of discovery or discovery shaft should fix a post, stake, or board, upon which should be designated the name of the lode, the name or names of the locators, the number of feet claimed, and in which direction from the point of discovery; it being essential that the location notice filed for record, in addition to the foregoing description, should state whether the entire claim of fifteen hundred feet is taken on

one side of the point of discovery, or whether it is partly upon one and partly upon the other side thereof, and in the latter case, how many feet are claimed upon each side of such discovery point.

16. **Record.**—Within a reasonable time, say twenty days after the location shall have been marked on the ground, or such time as is allowed by the local laws, notice thereof, accurately describing the claim in manner aforesaid, should be filed for record with the proper recorder of the district, who will thereupon issue the usual certificate of location.

17. **Annual Labor on New Locations.**—In order to hold the possessory right to a location made since May 10, 1872, not less than one hundred dollars' worth of labor must be performed, or improvements made thereon annually until entry shall have been made. Under the provisions of the Act of Congress approved January 22, 1880, the first annual expenditure becomes due and must be performed during the calendar year succeeding that in which the location was made. Expenditure made or labor performed prior to the first day of January succeeding the date of location, will not be considered as a part of, or applied upon the first annual expenditure required by law. Failure to make the expenditure or perform the labor required will subject the claim to re-location by any other party having the necessary qualifications, unless the original locator, his heirs, assigns, or legal representatives have resumed work thereon after such failure and before such re-location.

18. **The Expenditures Required upon Mining Claims** may be made from the surface or in running a tunnel for the development of such claims, the Act of February 11, 1875, providing that where a person or company has, or may, run a tunnel for the purpose of developing a lode or lodes owned by said person or company, the money so expended in said tunnel shall be taken and considered as expended on said lode or lodes, and such person or company shall not be required to perform work on the surface of said lode or lodes in order to hold the same.

19. **The importance of attending to these details** in the matter of location, labor, and expenditure will be the more readily perceived when it is understood that a failure to give the subject proper attention may invalidate the claim.

TUNNEL RIGHTS.

20. **Tunnel Rights.**—Section 2323 provides that where a tunnel is run for the development of a vein or lode, or for the discovery of mines, the owners of such tunnel shall have the right of possession of all veins or lodes within three thousand feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface; and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel, and while the same is being prosecuted with reasonable diligence shall be invalid; but failure to prosecute the work on the tunnel for six months shall be considered as an abandonment of the right

to all undiscovered veins or lodes on the line of said tunnel.

21. Line of Tunnel Protected.—The effect of this is simply to give the proprietors of a mining tunnel run in good faith, the possessory right to fifteen hundred feet of any blind lodes cut, discovered or intersected by such tunnel, which were not previously known to exist, within three thousand feet from the face or point of commencement of such tunnel, and to prohibit other parties, after the commencement of the tunnel, from prospecting for and making locations of lodes on the *line thereof* and within said distance of three thousand feet, unless such lodes appear upon the surface or were previously known to exist.

22. The term "face," as used in said section, is construed and held to mean the first working face formed in the tunnel, and to signify the point at which the tunnel actually enters cover; it being from this point that the three thousand feet are to be counted, upon which prospecting is prohibited as aforesaid.

23. Tunnel Notice and Stakes.—To avail themselves of the benefits of this provision of law, the proprietors of a mining tunnel will be required, at the time they enter cover as aforesaid, to give proper notice of their tunnel location by erecting a substantial post, board or monument at the face or point of commencement thereof, upon which should be posted a good and sufficient notice, giving the names of the parties or company claiming the tunnel right; the actual or proposed course or direction of the tunnel; the height and width thereof, and the

course and distance from such face or point of commencement to some permanent, well known objects in the vicinity by which to fix and determine the *locus* in manner heretofore set forth applicable to locations of veins or lodes, and at the time of posting such notice they shall, in order that miners or prospectors may be enabled to determine whether or not they are within the lines of the tunnel, establish the boundary lines thereof, by stakes or monuments placed along such lines at proper intervals, to the terminus of the three thousand feet from the face or point of commencement of the tunnel, and the lines so marked will define and govern as to the specific boundaries within which prospecting for lodes not previously known to exist is prohibited while work on the tunnel is being prosecuted with reasonable diligence.

24. Record of Tunnel.—At the time of posting notice and marking out the lines of the tunnel as aforesaid, a full and correct copy of such notice of location defining the tunnel claim must be filed for record with the mining recorder of the district, to which notice must be attached the sworn statement or declaration of the owners, claimants, or projectors of such tunnel, setting forth the facts in the case, stating the amount expended by themselves and the predecessors in interest in prosecuting work thereon; the extent of the work performed, and that it is *bona fide*, their intention to prosecute work on the tunnel so located and described, with reasonable diligence for the development of a vein or lode, or for the discovery of mines, or both, as the case may be. This notice of location must be duly recorded, and, with the said sworn state-

ment attached, kept on the recorder's files for future reference.

25. By a compliance with the foregoing much needless difficulty will be avoided, and the way for the adjustment of legal rights acquired in virtue of said section 2323 will be made much more easy and certain.

26. Tunnel Not Worked.—This office will take particular care that no improper advantage is taken of this provision of law by parties making or professing to make tunnel locations, ostensibly for the purpose named in the statute, but really for the purpose of monopolizing the lands lying in front of their tunnels to the detriment of the mining interests and to the exclusion of *bona fide* prospectors or miners, but will hold such tunnel claimants to a strict compliance with the terms of the statutes; and a *reasonable diligence* on their part in prosecuting the work is one of the essential conditions of their implied contract. Negligence or want of due diligence will be construed as working a forfeiture of their right to all undiscovered veins on the line of such tunnel.

APPLICATION FOR PATENT.

27. Manner of Proceeding to Obtain Government Title to Vein or Lode Claims.—By section 2325 authority is given for granting titles for mines by patent from the Government to any person, association, or corporation having the necessary qualifications as to citizenship and holding the right of possession to a claim in compliance with law.

28. Idem. — Survey.—The claimant is required in the first place to have a correct survey

of his claim made under authority of the surveyor-general of the State or Territory in which the claim lies: such survey to show with accuracy the exterior surface boundaries of the claim, which boundaries are required to be distinctly marked by monuments on the ground. Four plats and one copy of the original field notes, in each case, will be prepared by the surveyor-general; one plat and the original field notes to be retained in the office of the surveyor-general, one copy of the plat to be given the claimant for posting upon the claim, one plat and a copy of the field notes to be given the claimant for filing with the proper register, to be finally transmitted by that officer, with other papers in the case, to this office, and one plat to be sent by the surveyor-general to the register of the proper land district to be retained on his files for future reference. As there is no resident surveyor-general for the State of Arkansas, applications for the survey of mineral claims in said State should be made to the commissioner of this office, who, under the law, is *ex officio* the U. S. surveyor-general.

29. Posting Plat on the Claim.—The claimant is then required to post a copy of the plat of such survey in a conspicuous place upon the claim, together with notice of his intention to apply for a patent therefor, which notice will give the date of posting, the name of the claimant, the name of the claim, mine or lode; the mining district and county; whether the location is of record, and, if so, where the record may be found; the number of feet claimed along the vein, and the presumed direction thereof; the number of feet claimed on the lode in each direc-

tion from the point of discovery, or other well defined place on the claim; the name or names of adjoining claimants on the same or other lodes, or, if none adjoin, the names of the nearest claims, etc.

30. Land Office Posting.—After posting the said plat and notice upon the premises, the claimant will file with the proper register and receiver a copy of such plat and the field notes of survey of the claim, accompanied by the affidavit of at least two credible witnesses, that such plat and notice are posted conspicuously upon the claim, giving the date and place of such posting; a copy of the *notice* so posted to be attached to, and form a part of, said affidavit.

31. Statement of Claims.—Accompanying the field notes so filed must be the sworn statement of the claimant that he has the possessory right to the premises therein described, in virtue of a compliance by himself (and by his grantors, if he claims by purchase) with the mining rules, regulations, and customs of the mining district, State or Territory in which the claim lies, and with the mining laws of Congress; such sworn statement to narrate briefly, but as clearly as possible, the facts constituting such compliance, the origin of his possession, and the basis of his claim to a patent.

32. Abstract of Title.—This affidavit should be supported by appropriate evidence from the mining recorder's office as to his possessory right, as follows, viz: Where he claims to be the locator, or a locator in company with others who have since conveyed their interest in the location to him, a full, true and correct copy of such

location should be furnished, as the same appears upon the mining records; such copy to be attested by the seal of the recorder, or if he has no seal, then he should make oath, to the same being correct, as shown by his records. Where the applicant claims only as a purchaser for valuable consideration, a copy of the location record must be filed under seal or upon oath as aforesaid, with an abstract of title from the proper recorder, under seal or oath as aforesaid, brought down as near as practicable to date of filing the application, tracing the right of possession by a continuous chain of conveyances from the original locators to the applicant, also certifying that no conveyances affecting the title to the claim in question appear of record in his office other than those set forth in the accompanying abstract.

33. Lost Records.—In the event of the mining records in any case having been destroyed by fire or otherwise lost, affidavit of the fact should be made, and secondary evidence of possessory title will be received, which may consist of the affidavit of the claimant, supported by those of any other parties cognizant of the facts relative to his location, occupancy, possession, improvements, etc.; and in such case of lost records, any deeds, certificates of location or purchase, or other evidence which may be in the claimant's possession and tend to establish his claim, should be filed.

34. Publishers' Contract.—Upon the receipt of these papers, the register will, at the expense of the claimant (who must furnish the agreement of the publisher to hold applicant for

patent alone responsible for charges of publication), publish a notice of such application for the period of sixty days in a newspaper published nearest to the claim, and will post a copy of such notice in his office for the same period. When the notice is published in a *weekly* newspaper ten consecutive insertions are necessary; when in a *daily* newspaper the notice must appear in each issue for sixty-one consecutive issues, the first day of issue being excluded in estimating the period of sixty days.

35. Notice Must be Full.—The notices so published and posted must be as full and complete as possible, and embrace all the *data* given in the notice posted upon the claim.

36. Too much care cannot be exercised in the preparation of these notices, inasmuch as upon their accuracy and completeness will depend, in a great measure, the regularity and validity of the whole proceeding.

37. Choice of Newspaper.—In the publication of final proof notices the register has *no discretion* under the law to designate any other than the newspaper "nearest the land" for such purpose when such paper is a newspaper of general circulation. But he will in all cases designate the newspaper of general circulation that is published nearest the land, geographically measured. When two or more such newspapers are published in the same town, nearest the land, he may select the one which, in his honest and impartial judgment as a public officer, will best subserve the purpose of the law and the general interests of the public.

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38. **Newspaper charges** must not exceed the rates established by this office for the publication of legal notices.

39. **Surveyor-General's Certificate of \$500 Improvements.**—The claimant, either at the time of filing these papers with the register or at any time during the sixty days' publication, is required to file a certificate with the surveyor-general that not less than five hundred dollars' worth of labor has been expended or improvements made upon the claim by the applicant or his grantors; that the plat filed by the claimant is correct; that the field notes of the survey, as filed, furnish such an accurate description of the claim as will, if incorporated into a patent, serve to fully identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

40. **Idem.**—It will be the more convenient way to have this certificate indorsed by the surveyor-general, both upon the plat and field notes of survey filed by the claimant as aforesaid.

41. **Proof of Plat Remaining Posted.**—After the sixty days' period of newspaper publication has expired, the claimant will furnish from the office of publication a sworn statement that the notice was published for the statutory period, giving the first and last day of such publication, and his own affidavit showing that the plat and notice aforesaid remained conspicuously posted upon the claim sought to be patented during said sixty days' publication, giving the dates.

42. **Entry.—Statements of Sums Paid.**—Upon the filing of this affidavit the register

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will, if no adverse claim was filed in his office during the period of publication, permit the claimant to pay for the land according to the area given in the plat and field notes of survey aforesaid, at the rate of five dolliars for each acre and five dollars for each fractional part of an acre, the receiver issuing the usual duplicate receipt therefor. The claimant will also make a sworn statement of all charges and fees paid by him for publication and surveys, together with all fees and money paid the register and receiver of the land office; after which the whole matter will be forwarded to the Commissioner of the General Land Office and a patent issued thereon if found regular.

43. Proof of Posting in Land Office.—In sending up the papers in the case the register must not omit certifying to the fact that the notice was posted in his office for the full period of sixty days, such certificate to state distinctly when such posting was done and how long continued.

44. The consecutive series of numbers of mineral entries must be continued, whether the same are of lode or placer claims or mill sites.

45. Series of Numbers.—The surveyors-general should designate all surveyed mineral claims by a progressive series of numbers, beginning with survey No. 37, irrespective as to whether they are situated on surveyed or unsurveyed lands, the claim to be so designated at the date of issuing the order therefor, in addition to the local designation of the claim. It being required in all cases that the plat and field notes of the survey of a claim must, in addition to the reference to permanent objects in the

neighborhood, describe the *locus* of the claim, with reference to the lines of public surveys, by a line connecting a corner of the claim with the nearest public corner of the United States surveys, unless such claim be on unsurveyed lands at a distance of more than two miles from such public corner, in which latter case it should be connected with a United States mineral monument. Such connecting line must not be more than *two miles* in length and should be measured on the ground direct between the points, or calculated from actually surveyed traverse lines if the nature of the country should not permit direct measurement. If a regularly established survey corner is within two miles of a claim situated on unsurveyed lands, the connection should be made with such corner in preference to a connection with a United States mineral monument. The connecting line must be surveyed by the deputy mineral surveyor at the time of his making the particular survey, and be made a part thereof.

46. Diagram of Claims on Surveyed Land.

—Upon the approval of the survey of a mining claim made upon surveyed lands, the surveyor-general will prepare and transmit to the local land office and to this office a diagram tracing, showing the portions of legal 40-acre subdivisions made fractional by reason of the mineral survey, designating each of such portions by the proper lot number, beginning with No. 1 in each section and giving the area of each lot.

47. No Survey Before Record.—The survey and plat of mineral claims, required by section 2325, Revised Statutes of the United States, to be filed in the proper land office, with application

for patent, must be made subsequent to the recording of the location of the mine; and when the original location is made by survey of a United States deputy surveyor such location survey can not be substituted for that required by the statute, as above indicated.

48. Details for \$500 Improvements.—The surveyor-general should derive his information upon which to base his certificate, as to the value of labor expended or improvements made, from his deputy who makes the actual survey and examination upon the premises, and such deputy should specify with particularity and full detail the character and extent of such improvements.

49. The following particulars should be observed in the survey of every mining claim :

(1) The exterior boundaries of the claim should be represented on the plat of survey and in the field notes.

(2) The intersection of the lines of the survey with the lines of conflicting prior surveys should be noted in the field notes and represented upon the plat.

(3) Conflicts with unsurveyed claims, where the applicant for survey does not claim the area in conflict, should be shown by actual survey.

(4) The total area of the claim embraced by the exterior boundaries should be stated, and also the area in conflict with each intersecting survey, substantially as follows:

	Acres.
Total area of claim.....	10.50
Area in conflict with survey No. 302.....	1.56
Area in conflict with survey No. 948.....	2.33
Area in conflict with Mountain Maid lode mining claim, unsurveyed.....	1.48

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It does not follow that because mining surveys are required to exhibit all conflicts with prior surveys the areas of conflict are to be excluded. The field notes and plat are made a part of the application for patent, and care should be taken that the description does not inadvertently exclude portions intended to be retained. It is better that the application for patent should state the portions to be excluded in express terms. A survey executed as in the example given will enable the applicant for patent to exclude such conflicts as may seem desirable. For instance, the conflict with survey No. 302 and with the Mountain Maid lode claim might be excluded and that with survey No. 948 included.

50. Overlapping Lode Claims.—The rights granted to locators under section 2322, Revised Statutes, are restricted to such locations on veins, lodes, or ledges as may be "situated on the *public domain*." In applications for lode claims where the survey conflicts with a prior valid lode claim or entry, and the ground in conflict is excluded, the applicant not only has no right to the excluded ground, but he has no right to that portion of any vein or lode the top or apex of which lies within such excluded ground, unless his location was prior to May 10, 1872. His right to the lode claimed terminates where the lode, in its onward course or strike, intersects the exterior boundary of such excluded ground and passes within it.

51. End Line of Lode Claim Abutting on Prior Survey.—The end line of his survey should not, therefore, be established beyond such inter-

section, unless it should be necessary so to do for the purpose of including ground held and claimed under a location which was made upon public land and valid at the time it was made. To include such ground (which may possibly embrace other lodes) the end line of the survey may be established within the conflicting survey, but the line must be so run as not to extend any farther into the conflicting survey than may be necessary to make such end line parallel to the other end line and at the same time embrace the ground so held and claimed. The useless practice in such cases of extending *both* the side lines of a survey into the conflicting survey and establishing an end line wholly within it, beyond a point necessary under the rule just stated, will be discontinued.

PLACER CLAIMS.

52. Application for Patent.—The proceedings to obtain patents for claims usually called placers, including all forms of deposit, excepting veins of quartz or other rock in place, are similar to the proceedings prescribed for obtaining patents for vein or lode claims; but where said placer claim shall be upon surveyed lands, and conforms to legal subdivisions, no further survey or plat will be required, and all placer mining claims located after May 10, 1872, shall conform as nearly as practicable with the United States system of public land surveys and the rectangular subdivisions of such surveys, and no such location shall include more than twenty acres for each individual claimant; but where placer claims can not be conformed to legal subdivisions, survey and plat shall be made as on un-

surveyed lands. But where such claims are located previous to the public surveys, and do not conform to legal subdivisions, survey, plat, and entry thereof may be made according to the boundaries thereof, provided the location is in all respects legal.

53. Idem.—Price.—The proceedings for obtaining patents for veins or lodes having already been fully given, it will not be necessary to repeat them here, it being thought that careful attention thereto by applicants and the local officers will enable them to act understandingly in the matter, and make such slight modifications in the notice, or otherwise, as may be necessary in view of the different nature of the two classes of claims, placer claims being fixed, however, at two dollars and fifty cents per acre or fractional part of an acre.

54. Ten-Acre Lots.—By section 2330, authority is given for the subdivision of forty-acre legal subdivisions into *ten-acre* lots, which is intended for the greater convenience of miners in segregating their claims both from one another and from intervening agricultural lands.

55. No Survey in Such Case.—It is held, therefore, that under a proper construction of the law these ten-acre lots in mining districts should be considered and dealt with, to all intents and purposes, as legal subdivisions, and that an applicant having a legal claim which conforms to one or more of these ten-acre lots, either adjoining or cornering, may make entry thereof, after the usual proceedings, without further survey or plat.

56. Mode or Entry of Such Lots.—In cases of this kind, however, the notice given of the application must be very specific and accurate in description, and as the forty-acre tracts may be subdivided into ten-acre lots, either in the form of squares of ten by ten chains, or if parallelograms five by twenty chains, so long as the lines are parallel and at right angles with the lines of the public surveys, it will be necessary that the notice and application state specifically what ten-acre lots are sought to be patented, in addition to the other *data* required in the notice.

57. Description.—Where the ten-acre subdivision is in the form of a square, it may be described, for instance, as the "SE. $\frac{1}{4}$ of the SW. $\frac{1}{4}$ of NW. $\frac{1}{4}$;" or, if in the form of a parallelogram as aforesaid, it may be described as the "W. $\frac{1}{2}$ of the W. $\frac{1}{2}$ of the SW. $\frac{1}{4}$ of the NW. $\frac{1}{4}$ (or the N. $\frac{1}{2}$ of the S. $\frac{1}{2}$ of the NE. $\frac{1}{4}$ of the SE. $\frac{1}{4}$) of section —, township —, range —," as the case may be; but, in addition to this description of the land, the notice must give all the other *data* that is required in a mineral application, by which parties may be put on inquiry as to the premises sought to be patented. The proofs submitted with applications for claims of this kind must show clearly the character and the extent of the improvements upon the premises.

Inasmuch as the surveyor-general has no duty to perform in connection with the entry of a placer claim of legal subdivisions, the proof of improvements must show their value to be not less than *five hundred dollars* and that they were made by the applicant for patent or his grantors. The annual expenditure to the amount of \$100

required by section 2324, Revised Statutes, must be made upon placer claims as well as lode claims.

58. Lode in Placer.—Applicants for patent to a placer claim, who are also in possession of a known vein or lode included therein, must state in their application that the placer includes such vein or lode. The published and posted notices must also include such statement. If veins or lodes lying within a placer location are owned by other parties, the fact should be distinctly stated in the application for patent and in all the notices. But in all cases whether the lode is claimed or excluded, it must be surveyed and marked upon the plat; the field notes and plat giving the area of the lode claim or claims and the area of the placer separately. It should be remembered that an application which omits to include an application for a known vein or lode therein, must be construed as a conclusive declaration that the applicant has no right of possession to the vein or lode. Where there is no known lode or vein, the fact must appear by the affidavit of two or more witnesses.

59. Quantity of Placer Ground Subject to Location.—By section 2330 it is declared that no location of a placer claim, made after July 9, 1870, shall exceed one hundred and sixty acres for any one person or association of persons, which location shall conform to the United States surveys.

60. Conformation to Public Survey.—Section 2331 provides that all placer mining claims located after May 10, 1872, shall conform as nearly as practicable with the United States

systems of public surveys and the subdivisions of such surveys, and no such locations shall include more than twenty acres for each individual claimant.

61. Limit to Size of Location.—The foregoing provisions of law are construed to mean that after the 9th day of July, 1870, no location of a placer claim can be made to exceed one hundred and sixty acres, whatever may be the number of locators associated together, or whatever the local regulations of the district may allow; and that from and after May 10, 1872, no location made by an individual can exceed twenty acres, and no location made by an association of individuals can exceed one hundred and sixty acres, which location of one hundred and sixty acres, cannot be made by a less number than eight *bona fide* locators; and no local laws or mining regulations can restrict a placer location to less than twenty acres, although the locator is not compelled to take so much.

62. How Located.—The regulations hereinbefore given as to the manner of marking locations on the ground, and placing the same on record, must be observed in the case of placer locations so far as the same are applicable, the law requiring, however, that where placer claims are upon *surveyed* public lands the locations must hereafter be made to conform to legal subdivisions thereof as near as practicable.

63. Classification of the Land.—The first care in recognizing an application for patent upon a placer claim must be exercised in determining the exact classification of the lands. To

this end the clearest evidence of which the case is capable should be presented.

(1) If the claim be all placer ground, that fact must be stated in the application and corroborated by accompanying proofs; if of mixed placers and lodes, it should be so set out, with a description of all known lodes situated within the boundaries of the claim. A specific declaration, such as is required by section 2333, Revised Statutes, must be furnished as to each lode intended to be claimed. All other known lodes are, by the silence of the applicant, excluded by law from all claim by him, of whatsoever nature, possessory or otherwise.

(2) Section 2395, Revised Statutes (subdivision 7), requires the surveyor to "note in his field books the true situation of all mines, salt licks, salt springs, and mill seats which come to his knowledge," also "all water courses over which the lines he runs may pass." It further requires him to "note the quality of the lands." These descriptive notes are required by subdivision 8 to be incorporated in the plat by the surveyor general.

(3) If these duties have been performed, the public surveys will furnish a reasonable guide to the district officers and to claimants in prosecuting their applications. But experience has shown that great neglect has resulted from inattention to the law in this respect, and the regular plats are of very little value in the matter. It will, therefore, be required in the future that deputy surveyors shall, at the expense of the parties, make full examination of all placer claims surveyed by them, and duly note the facts as specified in the law, stating the quality and

composition of the soil, the kind and amount of timber and other vegetation, the *locus* and size of streams, and such other matters as may appear upon the surface of the claim. This examination should include the character and extent of all surface and underground workings, whether placer or lode, for mining purposes.

(4) In addition to these data, which the law requires to be shown in all cases, the deputy should report with reference to the proximity of centers of trade or residence; also of well known systems of lode deposit or of individual lodes. He should also report as to the use or adaptability of the claim for placer mining; whether water has been brought upon it in sufficient quantity to mine the same, or whether it can be procured for that purpose; and, finally, what works or expenditures have been made by the claimant or his grantors for the development of the claim, and their situation and location with respect to the same as applied for.

(5) This examination should be reported by the deputy under oath to the surveyor-general, and duly corroborated; and a copy of the same should be furnished with the application for patent to the claim, constituting a part thereof, and included in the oath of the applicant.

(6) Applications awaiting entry, whether published or not, must be made to conform to these regulations, with respect to examination as to the character of the land. Entries already made will be suspended for such additional proofs as may be deemed necessary in each case.

MILL SITES.

64. **Two Classes.**—Section 2337 provides that "where non-mineral land not contiguous to

the vein or lode is used or occupied by the proprietor of such vein or lode for mining or milling purposes, such non-adjacent surface ground may be embraced and included in an application for a patent for such vein or lode, and the same may be patented therewith, subject to the same preliminary requirements as to survey and notice as are applicable to veins or lodes; but no location hereafter made of such non-adjacent land shall exceed five acres, and payment for the same must be made at the same rate as fixed by this chapter for the superfices of the lode. The owner of a quartz mill or reduction works, not owning a mine in connection therewith, may also receive a patent for his mill site, as provided in this section."

65. To avail themselves of this provision of law, parties holding the possessory right to a vein or lode, and to a piece of non-mineral land not contiguous thereto, for mining or milling purposes, not exceeding the quantity allowed for such purpose by section 237, United States Revised Statutes, or prior laws, under which the land was appropriated, the proprietors of such vein or lode may file in the proper land office their application for a patent, under oath, in manner already set forth herein, which application, together with the plat and field notes, may include, embrace, and describe, in addition to the vein or lode, such non-contiguous mill site, and after due proceedings as to notice, etc., a patent will be issued conveying the same as one claim.

66. Lots "A" and "B."—In making the survey in a case of this kind, the lode claim should

be described in the plat and field notes as "Sur. No. 37, A," and the mill site as "Sur. No. 37, B," or whatever may be its appropriate numerical designation; the course and distance from a corner of the mill site to a corner of the lode claim to be invariably given in such plat and field notes, and a copy of the plat and notice of application for patent must be conspicuously posted upon the mill site as well as upon the vein or lode for the statutory period of sixty days. In making the entry no separate receipt or certificate need be issued for the mill site, but the whole area of both lode and mill site will be embraced in one entry, the price being five dollars for each acre and fractional part of an acre embraced by such lode and mill site claim.

67. Mill Site Without Lode.—In case the owner of a quartz mill or reduction works is not the owner or claimant of a vein or lode, the law permits him to make application therefor in the same manner prescribed herein for mining claims, and after due notice and proceedings, in the absence of a valid adverse filing, to enter and receive a patent for his mill site at said price per acre.

68. Proof of Non-Mineral Character and of Use by Applicant.—In every case there must be satisfactory proof that the land claimed as a mill site is not mineral in character, which proof may, where the matter is unquestioned, consist of the sworn statement of two or more persons capable from acquaintance with the land to testify understandingly.*

*For form of affidavit under Rule 68, see APPLICATION FOR PATENT.

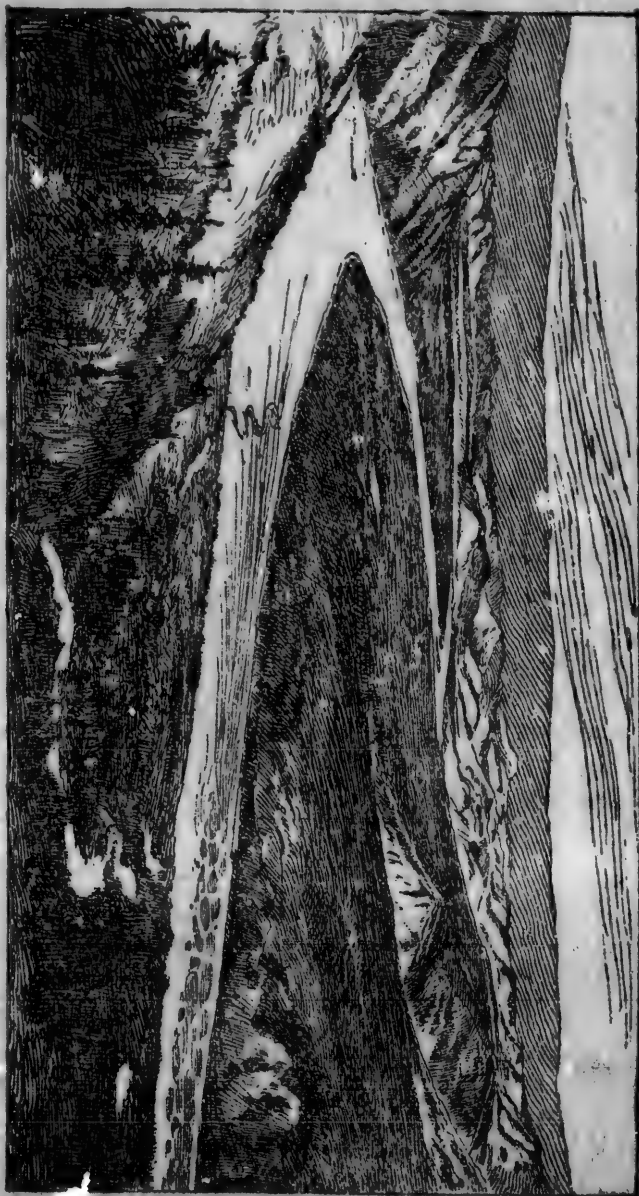
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POSSESSORY RIGHT.

69. Title by Adverse Possession.—With regard to the proofs necessary to establish the possessory right to a mining claim, section 2332 provides that "where such person or association, they and their grantors, have held and worked their claims for a period equal to the time prescribed by the Statute of Limitations for mining claims of the State or Territory where the same may be situated, evidence of such possession and working of the claims for such period shall be sufficient to establish a right to a patent thereto under this chapter, in the absence of any adverse claim."

70. Chain of Title Broken but Possession Clear.—This provision of law will greatly lessen the burden of proof, more especially in the case of old claims located many years since, the records of which, in many cases, have been destroyed by fire, or lost in other ways during the lapse of time, but concerning the possessory right to which all controversy or litigation has long been settled.

71. Details of Proof in Such Case.—When an applicant desires to make his proof of possessory right in accordance with this provision of law, he will not be required to produce evidence of location, copies of conveyances, or abstracts of title, as in other cases, but will be required to furnish a duly certified copy of the Statute of Limitation of mining claims for the State or Territory, together with his sworn statement giving a clear and succinct narration of the facts as to the origin of his title, and likewise as to the continuation of his possession of

the mining ground covered by his application; the area thereof; the nature and extent of the mining that has been done thereon; whether there has been any opposition to his possession, or litigation with regard to his claim, and, if so, when the same ceased; whether such cessation was caused by compromise or by judicial decree, and any additional facts within the claimant's knowledge having a direct bearing upon his possession and bona fides which he may desire to submit in support of his claim.

72. Certificate of no Suit.—There should likewise be filed a certificate, under seal of the court having jurisdiction of mining cases within the judicial district embracing the claim, that no suit or action of any character whatever involving the right of possession to any portion of the claim applied for is pending, and that there has been no litigation before said court affecting the title to said claim or any part thereof for a period equal to the time fixed by the Statute of Limitations for mining claims in the State or Territory as aforesaid, other than that which has been finally decided in favor of the claimant.

73. Corroborating Affidavits.—The claimant should support his narrative of facts relative to his possession, occupancy, and improvements by corroborative testimony of any disinterested person or persons of credibility who may be cognizant of the facts in the case and are capable of testifying understandingly in the premises.

74. Proof of Annual Labor.—As a condition for the making of application for patent according to section 2325, there must be a preliminary

showing of work or expenditure upon each location, either by showing the full amount sufficient to the maintenance of possession under section 2324 for the pending year; or, if there has been failure, it should be shown that work has been resumed so as to prevent relocation by adverse parties after abandonment.

The "pending year" means the calendar year in which application is made, and has no reference to a showing of work at date of the final entry.

75. This preliminary showing may, where the matter is unquestioned, consist of the affidavit of two or more witnesses familiar with the facts.

76. **Proof of Citizenship of Mining Claimants.**—The proof necessary to establish the citizenship of applicants for mining patents must be made in the following manner: In case of an incorporated company, a certified copy of their charter or certificate of incorporation must be filed. In case of an association of persons unincorporated, the affidavit of their duly authorized agent, made upon his own knowledge or upon information and belief, setting forth the residence of each person forming such association, must be submitted. This affidavit must be accompanied by a power of attorney from the parties forming such association, authorizing the person who makes the affidavit of citizenship to act for them in the matter of their application for patent.

77. In case of an individual or an association of individuals who do not appear by their duly authorized agent, you will require the

affidavit of each applicant, showing whether he is a native or naturalized citizen, when and where born, and his residence.

78. In case an applicant has declared his intention to become a citizen or has been naturalized, his affidavit must show the date, place and the court before which he declared his intention, or from which his certificate of citizenship issued, and present residence.

79. **Who May Take Affidavit.**—The affidavit of the claimant as to his citizenship may be taken before the register or receiver, or any other officer authorized to administer oaths within the land district; or, if the claimant is residing beyond the limits of the district, the affidavit may be taken before the clerk of any court of record or before any notary public of any State or Territory.

80. **Affidavits Out of Land District.**—If citizenship is established by the testimony of disinterested persons, such testimony may be taken at any place before any person authorized to administer oaths, and whose official character is duly verified.

ADVERSE CLAIMS.

81. **Section 2326, and the Act of April 26, 1882,** provide for adverse claims, fix the time within which they shall be filed to have legal effect, and prescribe the manner of their adjustment, etc.

82. **Must be Filed Within the District Under Oath.**—An adverse mining claim must be filed with the register and receiver of the land office where the application for patent was filed,

or with the register and receiver of the district in which the land is situated at the time of filing the adverse claim. It must be on the oath of the adverse claimant, or it may be verified by the oath of any duly authorized agent or attorney-in-fact of the adverse claimant, cognizant of the facts stated.

83. Where an agent or attorney-in-fact verifies the adverse claim, he must distinctly swear that he is such agent or attorney, and accompany his affidavit by proof thereof.

84. The agent or attorney-in-fact must make the affidavit in verification of the adverse claim within the land district where the claim is situated.

85. The adverse notice must fully set forth the nature and extent of the interference or conflict; whether the adverse party claims as a purchaser for valuable consideration or as a locator; if the former, a certified copy of the original location, the original conveyance, a duly certified copy thereof, or an abstract of title from the office of the proper recorder should be furnished, or if the transaction was a merely verbal one he will narrate the circumstances attending the purchase, the date thereof, and the amount paid, which facts should be supported by the affidavit of one or more witnesses, if any were present at the time, and if he claims as a locator he must file a duly certified copy of the location from the office of the proper recorder.

86. Plat.—In order that the "boundaries" and "extent" of the claim may be shown, it will be incumbent upon the adverse claimant to file a plat showing his entire claim, its relative situa-

tion or position with the one against which he claims, and the extent of the conflict. This plat must be made from an actual survey by a United States deputy surveyor, who will officially certify thereon to its correctness; and in addition there must be attached to such plat of survey a certificate or sworn statement by the surveyor as to the approximate value of the labor performed or improvements made upon the claim by the adverse party or his predecessors in interest, and the plat must indicate the position of any shafts, tunnels, or other improvements, if any such exist, upon the claim of the party opposing the application, and by which party said improvements were made; *Provided, however,* That if the application for patent describes the claim by legal subdivisions, the adverse claimant, if also claiming by legal subdivisions, may describe his adverse claim in the same manner, without further survey or plat.

37. Notice of Adverse.—Upon the foregoing being filed within the sixty days as aforesaid, the register, or in his absence the receiver, will give notice in writing, to *both parties* to the contest that such adverse claim has been filed, informing them that the party who filed the adverse claim will be required within thirty days from the date of such filing to commence proceedings in a court of competent jurisdiction to determine the question of right of possession, and to prosecute the same with reasonable diligence to final judgment, and that should such adverse claimant fail to do so, his adverse claim will be considered waived, and the application for patent be allowed to proceed upon its merits.

88. Stays Proceedings.—When an adverse claim is filed as aforesaid, the register or receiver will indorse upon the same the precise date of filing, and preserve a record of the date of notifications issued thereon; and thereafter all proceedings on the application for patent will be suspended, with the exception of the completion of the publication and mailing of notices and plat, and the filing of the necessary proof thereof, until the controversy shall have been adjudicated in court, or the adverse claim waived or withdrawn.

89. Copy of Judgment.—Where an adverse claim has been filed and suit thereon commenced within the statutory period, and final judgment determining the right of possession rendered in favor of the applicant, it will not be sufficient for him to file with the register a certificate of the clerk of the court, setting forth the facts as to such judgment, but he must, before he is allowed to make entry, file a certified copy of the judgment, together with the other evidence required by section 2326, Revised Statutes.

90. Where such suit has been dismissed, a certificate of the clerk of the court to that effect, or a certified copy of the order of dismissal, will be sufficient.

91. In no case will a relinquishment of the ground in controversy, or other proof, filed with the register or receiver, be accepted in lieu of the evidence required.

92. Certificates of No Suit Brought.—Where an adverse claim has been filed, but no suit commenced against the applicant for patent

within the statutory period, a certificate to that effect by the clerk of the State court having jurisdiction in the case, and also by the clerk of the circuit court of the United States for the district in which the claim is situated, will be required.

93. Substitution.—A party who is not an applicant for patent under section 2325, Revised Statutes, or the assignee of such applicant, is not entitled to make entry under said section, and in no case will the name of such party be inserted in the certificate of entry. This regulation has no reference to proceedings under section 2326.

94. Trustees.—Any party applying to make entry as *trustee* must disclose fully the nature of the trust and the name of the *cestui que trust*, and such trustee, as well as the beneficiaries, must furnish satisfactory proof of citizenship; and the names of beneficiaries, as well as that of the trustee, must be inserted in the final certificate of entry.

95. Scrutiny of Proofs.—No entry will be allowed until the register has satisfied himself, by a careful examination, that proper proofs have been filed upon all the points indicated in official regulations in force, and that they show a sufficient *bona fide* compliance with the laws and such regulations.

96. Alaska.—The administration of the mining laws as prescribed by these regulations will be, so far as applicable, adopted for, and extended to, Alaska.

(1) The *ex-officio* register, receiver, and surveyor-general while acting as such, and their clerks and deputy surveyors, will be deemed

subject to the laws and regulations governing the official conduct and responsibilities of similar officers and persons under general Statutes of the United States.

(2) The Commissioner of the General Land Office will exercise the same general supervision over the execution of the laws as are or may be exercised by him in other mineral districts.

**APPOINTMENT OF DEPUTY SURVEYORS OF MINING
CLAIMS—CHARGES FOR SURVEYS AND
PUBLICATIONS—FEES OF REGIS-
TERS AND RECEIVERS, ETC.**

97. Newspaper Charges.—Section 2334 provides for the appointment of surveyors of mineral claims, authorizes the Commissioners of the General Land Office to establish the rates to be charged for surveys and newspaper publications.

Under this authority of law the following rates have been established as the maximum charges for newspaper publications in mining cases:

(1) Where a daily newspaper is designated, the charge shall not exceed seven dollars for each ten lines of space occupied, and where a weekly newspaper is designated as the medium of publication, five dollars for the same space will be allowed. Such charge shall be accepted as full payment for publication in each issue of the newspaper for the entire period required by law.

It is expected that these notices shall not be so abbreviated as to curtail the description essential to a perfect notice, and the said rates

established upon the understanding that they are to be in the usual body-type used for advertisements.

(2) For the publication of citations in contests or hearings involving the character of lands, the charges shall not exceed eight dollars for five publications in weekly newspapers, or ten dollars for publications in daily newspapers for thirty days.

98. Deputy Surveyors.—The surveyor-general of the several districts will, in pursuance of said law, appoint in each land district as many *competent* deputies for the survey of mining claims as may seek such appointment; it being distinctly understood that all expenses of these notices and surveys are to be borne by the mining claimants and not by the United States; the system of making *deposits* for mineral surveys, as required by previous instructions, being hereby revoked as regards *field work*; the claimant having the option of employing *any* deputy surveyor within such district to do his work in the field.

99. Payment to Surveyor-General.—With regard to the *platting* of the claim and other *office work* in the surveyor-general's office, that officer will make an estimate of the cost thereof, which amount the claimant will deposit with any assistant United States treasurer or designated depository in favor of the United States treasurer, to be passed to the credit of the fund created by "individual depositors for surveys of the public lands," and file with the surveyor-general duplicate certificates of such deposit in the usual manner.

100. One Deputy to a District.—The surveyors-general will endeavor to appoint mineral deputy surveyors so that one or more may be located in each mining district for the greater convenience of miners.

101. Oath.—Duties of Deputies.—The usual oaths will be required of these deputies and their assistants as to the correctness of each survey executed by them.

The duty of the deputy mineral surveyor ceases when he has executed the survey and returned the field notes and preliminary plat thereof with his report to the surveyor-general. He will not be allowed to prepare for the mining claimant the papers in support of an application for patent, or otherwise perform the duties of an attorney before the land office in connection with a mining claim.

The surveyors-general and local land officers are expected to report any infringement of this regulation to this office.

102. Statement of Charges.—The law requires that each applicant shall file with the register and receiver a sworn statement of all charges and fees paid by him for publication of notice and for survey, together with all fees and money paid the register and receiver, which sworn statement is required to be transmitted to this office for the information of the Commissioner.

103. Exorbitant Charges.—Should it appear that excessive or exorbitant charges have been made by any surveyor or any publisher, prompt action will be taken with the view of correcting the abuse.

104. **The fees payable to the register and receiver for filing and acting upon applications for mineral land patents are five dollars to each officer, to be paid by the applicant for patent at the time of filing, and the like sum of five dollars is payable to each officer by an adverse claimant at the time of filing his adverse claim. (Sec. 2238, R. S., paragraph 9.)**

105. **Legal Tender.**—All fees or charges under this law may be paid in United States currency.

106. **Monthly Report to General Land Office.**—The register and receiver will, at the close of each month, forward to this office an abstract of mining applications filed, and a register of receipts, accompanied with an abstract of mineral lands sold; and an abstract of adverse claims filed.

107. **Accounts of Land Office.**—The fees and purchase money received by registers and receivers must be placed to the credit of the United States in the receiver's monthly and quarterly account, charging up in the disbursing account the sums to which the register and receiver may be respectively entitled as fees and commissions, with limitations in regard to the legal maximum.

PROCEEDINGS BEFORE THE REGISTER AND RECEIVER AND SURVEYORS-GENERAL IN CONTESTS AND HEARINGS TO ESTABLISH THE CHARACTER OF LANDS.

108. **The "Rules of Practice in cases before the United States district land offices, the General Land Office, and the Department of the**

Interior," approved August 13, 1885, will, as far as applicable, govern in all cases and proceedings arising in contests and hearings to determine the mineral or non-mineral character of lands.

109. Agricultural Entry of Mineral Lands.

—No public land shall be withheld from entry as agricultural land on account of its mineral character, except such as is returned by the surveyor-general as mineral; and the presumption arising from such a return may be overcome by testimony taken in the manner hereinafter described.

110. Hearings to determine the character of land, as practically distinguished, are of two kinds:

(1) Where lands which are sought to be entered and patented as agricultural are alleged by affidavit to be mineral, or when sought as mineral their non-mineral character is alleged.

The proceedings relative to this class are in the nature of a contest between two or more known parties.

(2) When lands are returned as mineral by the surveyor-general.

When such lands are sought to be entered as agricultural, notice must be given by publication for thirty days, with posting in the local office for the same period.

111. Examination of Witnesses.—At the hearings under either of the aforesaid classes, the claimants and witnesses will be thoroughly examined with regard to the character of the land; whether the same has been thoroughly

prospected; whether or not there exists within the tract or tracts claimed any lode or vein of quartz or other rock in place, bearing gold, silver, cinnabar, lead, tin, or copper, or other valuable deposit which has ever been claimed, located, recorded, or worked; whether such work is entirely abandoned or whether occasionally resumed; if such lode does exist, by whom claimed, under what designation and in which subdivision of the land it lies; whether any placer mine or mines exist upon the land; if so, what is the character thereof—whether of the shallow surface description, or of the deep cement, blue lead or gravel deposits; to what extent mining is carried on when water can be obtained, and what the facilities are for obtaining water for mining purposes; upon what particular ten-acre subdivisions mining has been done, and at what time the land was abandoned for mining purposes, if abandoned at all.

112. The testimony should also show the agricultural capacities of the land, what kind of crops are raised thereon, and the value thereof; the number of acres actually cultivated for crops of cereals or vegetables, and within which particular ten-acre subdivision such crops are raised; also which of these subdivisions embrace the improvements, giving in detail the extent and value of the improvements, such as house, barn, vineyard, orchard, fencing, etc., and mining improvements.

113. The testimony should be as full and complete as possible; and in addition to the leading points indicated above, where an attempt is made to prove the mineral character of lands

which have been entered under the agricultural laws, it should show at what date, if at all, valu-



able deposits of mineral were first known to exist on the lands.

114. Division Contested—Ground Survey.—When the case comes before this office, such decision will be made as the law and the facts may justify; and in cases where a survey is necessary to set apart the mineral from the agricultural land, the necessary instructions will be given to enable the proper party, *at his own expense*, to have the work done, at his option, either by United States deputy, county, or other local surveyor; the survey in such case, where the claims to be segregated are vein or lode claims must be executed in such manner as will conform to the requirements in section 2320, U. S. Revised Statutes, as to length and width and parallel end lines.

115. Proof of Survey—Affidavits Before Whom Taken.—Such survey, when executed, must be properly sworn to by the surveyor, either before a notary public, officer of a court of record, or before the register or receiver, the deponent's character and credibility to be properly certified to by the officer administering the oath.

116. Platting Same.—Upon the filing of the plat and field notes of such survey, duly sworn to as aforesaid, you will transmit the same to the surveyor-general for his verification and approval; who, if he finds the work correctly performed, will properly mark out the same upon the original township plat in his office, and furnish authenticated copies of such plat and description both to the proper local land office and to this office, to be affixed to the duplicate and triplicate township plats respectively.

117. Diagram.—With the copy of plat and description furnished the local office and this

office, must be a diagram tracing verified by the surveyor-general, showing the claim or claims segregated, and designating the separate fractional agricultural tracts in each 40-acre legal subdivision by the proper lot number, beginning with No. 1 in each section, and giving the area in each lot, the same as provided in paragraph 45, in the survey of mining claims on surveyed lands.

118. Proceedings if Land Awarded to be Mineral.—The fact that certain tract of land is decided upon testimony to be mineral in character is by no means equivalent to an award of the land to a miner. A miner is compelled by law to give sixty days' publication of notice and posting of diagrams and notices, as a preliminary step; and then, before he can enter the land, he must show that the land yields mineral; that he is entitled to the possessory right thereto in virtue of compliance with local customs or rules of miners, or by virtue of the Statute of Limitations; that he or his grantors have expended, in actual labor and improvements, an amount of not less than five hundred dollars thereon, and that the claim is one in regard to which there is no controversy or opposing claim. After all these proofs are met, he is entitled to have a survey made at his own cost where a survey is required, after which he can enter and pay for the land embraced by his claim.

119. Blank forms for proofs in mineral cases are not furnished by the General Land Office.

THOMAS H. CARTER, Commissioner.

Approved December 10th, 1891.

JOHN W. NOBLE, Secretary.

CANADIAN MINING REGULATIONS

Governing Placer Mining Along the Yukon River and Its Tributaries in the Northwest Territories.

INTERPRETATION.

"Bar Diggings," shall mean any part of a river over which the water extends when the water is in its flooded state, and which is not covered at low water.

Mines on Benches shall be known as bench diggings, and shall, for the purpose of defining the size of such claims, be excepted from dry diggings.

"Dry Diggings" shall mean any mine over which a river never extends.

"Miner" shall mean a male or female over the age of eighteen, but not under that age.

"Claims" shall mean the personal right of property in a placer mine or diggings during the time for which the grant of such mine or diggings is made.

"Legal Post" shall mean a stake standing not less than four feet above the ground and squared on four sides for at least one foot from the top. Both sides so squared shall measure at least four inches across the face. It shall also

mean any stump or tree cut off and squared or faced to the above height and size.

"Close Season" shall mean the period of the year during which placer mining is generally suspended. The period to be fixed by the gold commissioner in whose district the claim is situated.

"Locality" shall mean the territory along a river (tributary of the Yukon), and its affluents.

"Mineral" shall include all minerals whatsoever other than coal.

NATURE AND SIZE OF CLAIMS.

First—Bar Diggings: A strip of land 100 feet wide at high water mark and thence extending along into the river to its lowest water level.

Second—The Sides of a Claim for Bar Diggings shall be two parallel lines run as nearly as possible at right angles to the stream and shall be marked by four legal posts, one at each end of the claim at or about high water mark, also one at each end of the claim at or about the edge of the water. One of the posts at high water-mark shall be legibly marked with the name of the miner and the date upon which the claim is staked.

Third—Dry Diggings shall be 100 feet square and shall have placed at each of its four corners a legal post, upon one of which shall be legibly marked the name of the miner and the date upon which the claim was staked.

Fourth—Creek and River Claims shall be 500 feet long, measured in direction of the general course of the stream, and shall extend in width from base to base of the hill or bench on

each side, but when the hill or benches are less than 100 feet apart, the claim may be 100 feet in depth. The sides of a claim shall be two parallel lines run as nearly as possible at right angles to the stream. The sides shall be marked with legal posts at or about the edge of the water, and at the rear boundaries of the claim. One of the legal posts at the stream shall be legibly marked with the name of the miner and the date upon which



N. W. Police at Rest.

the claim was staked.

Fifth—Bench Claims shall be 100 feet square.

Sixth—In Defining the Size of Claims, they shall be measured horizontally, irrespective of inequalities on the surface of the ground.

Seventh—If Any Person or Persons Shall Discover a New Mine, and such discovery shall be established to the satisfaction of the gold commissioner,



N. W. Police on Duty.

a claim for the bar diggings 750 feet in length may be granted.

A New Stratum of auriferous earth or gravel situated in a locality where the claims are abandoned, shall for this purpose, be deemed a new mine, although the same locality shall have previously been worked at a different level.

Eighth—The forms of application for a grant for placer mining and the grant of the same shall be those contained in forms "H" and "I" in the schedule hereto.

Ninth—A claim shall be recorded with the gold commissioner in whose district it is situated within three days after the location thereof, if it is located within ten miles of the commissioner's office. One extra day shall be allowed for making such record for every additional ten miles and fraction thereof.

Tenth—In the event of the absence of the gold commissioner from his office, entry for a claim may be granted by any person whom he may appoint to perform his duties in his absence.

Eleventh—Entry shall not be granted for a claim which has not been staked by the applicant in person, in the manner specified in these regulations. An affidavit that the claim was staked out by the applicant shall be embodied in form "H" of the schedule hereto.

Twelfth—An entry fee of \$15 shall be charged for the first year and an annual fee of \$100 for each of the following years. This provision shall apply to the locations for which entries have already been granted.

Thirteenth—After the recording of a claim, the removal of any post by the holder thereof, or any person acting in his behalf, for the purpose

of changing the boundaries of his claim, shall act as a forfeiture of the claim.

Fourteenth—The entry of every holder for a grant for placer mining must be renewed, and his receipt relinquished and replaced every year, the entry fee being paid each year.

Fifteenth—No miner shall receive a grant for more than one mining claim in the same locality; but the same miner may hold any number of claims by purchase, and any number of miners may unite to work their claims in common upon such terms as they may arrange, provided such agreement be registered with the gold commissioner and a fee of \$5 paid for each registration.

Sixteenth—Any miner or miners may sell, mortgage or dispose of his or their claims, provided such disposal be registered with, and a fee of \$2 paid to the gold commissioner, who shall thereupon give the assignee a certificate in form "J" in the schedule hereto.

Seventeenth—Every miner shall, during the continuance of his grant, have the exclusive right of entry upon his own claim for the miner-like working thereof, and the construction of a residence thereon, and shall be entitled exclusively to all the proceeds realized therefrom; but he shall have no surface rights therein, and the gold commissioner may grant to the holders of adjacent claims such rights of entry thereon as may be absolutely necessary for the working of their claims, upon such terms as may to him seem reasonable. He may also grant permits to miners to cut timber thereon for their own use, upon payment of the dues prescribed by the regulations in that behalf.

Eighteenth—Every miner shall be entitled to

the use of so much of the water naturally flowing through or past his claim, and not already lawfully appropriated, as shall in the opinion of the gold commissioner, be necessary for the due working thereof, and shall be entitled to drain his own claim free of charge.

Nineteenth—A claim shall be deemed to be abandoned and open to the occupation and entry by any person when the same shall have remained unworked on working days by the grantee thereof or by some person on his behalf for the space of seventy-two hours, unless sickness or other reasonable cause may be shown to the satisfaction of the gold commissioner, or unless the grantee is absent on leave given by the commissioner, and the gold commissioner, upon obtaining evidence satisfactory to himself that this provision is not being complied with, may cancel the entry given for a claim.

Twentieth—If the land upon which a claim has been located is not the property of the crown it will be necessary for the person who applies for entry to furnish proof that he has acquired from the owner of the land the surface right before entry can be granted.

Twenty-first—If the occupier of the lands has not received a patent therefor, the purchase money of the surface rights must be paid to the crown, and a patent of the surface rights will issue to the party who acquired the mining rights. The money so collected will either be refunded to the occupier of the land when he is entitled to a patent therefor, or will be credited to him on account of payment for land.

Twenty-second—When the party obtaining the mining rights cannot make an arrangement

with the owner thereof for the acquisition of the surface rights it shall be lawful for him to give notice to the owner or his agent, or the occupier to appoint an arbitrator to act with another arbitrator named by him in order to award the amount of compensation to which the owner or occupant shall be entitled. The notice mentioned in this section shall be according to form to be obtained upon application from the gold commissioner for the district in which the lands in question lie, and shall, when practicable, be personally served on such owner or his agent, if known, or occupant, and after reasonable efforts have been made to effect personal service without success, then such notice shall be served upon the owner or agent within a period to be fixed by the gold commissioner before the expiration of the time limited in such notice. If the proprietor refuses or declines to appoint an arbitrator, or when, for any other reason, no arbitrator is appointed by the proprietor in the time limited therefor in the notice provided by this section, the gold commissioner for the district in which the lands in question lie, shall, on being satisfied by affidavit that such notice has come to the knowledge of such owner, agent or occupant, or that such owner, agent or occupant, wilfully evades the service of such notice, or can not be found, and that reasonable efforts have been made to effect such service, and that the notice was left at the last place of abode of such owner, agent or occupant, appoint an arbitrator on his behalf.

Twenty-third—(a) All arbitrators appointed under the authority of these regulations shall be sworn before a justice of the peace to the imper-

tial discharge of the duties assigned to them, and they shall forthwith proceed to estimate the reasonable damages which the owner or occupant of such lands according to their several interests therein shall sustain by reason of such prospecting and mining operations.

(b) In estimating such damages the arbitrators shall determine the value of the land, irrespective of any enhancement thereof from the existence of mineral therein.

(c) In case such arbitrators cannot agree they may select a third arbitrator, and when the two arbitrators cannot agree upon a third arbitrator, the gold commissioner for the district in which the lands in question lie shall select such third arbitrator.

(d) The award of any two such arbitrators made in writing shall be final, and shall be filed with the gold commissioner for the district in which the lands lie.

If any cases arise for which no provision is made in these regulations, the provisions of the regulations governing the disposal of mineral lands other than coal lands, approved by his excellency the governor, in council, on the 9th of November, 1889, shall apply.

Certificate of Assignment of a Placer Mining Claim.

"Form 'J.'

"No.....

"Department of the Interior.

"Agency.....18....

"This is to certify that (B. C.) has (or have) filed an assignment in due form dated..... 18.... and accompanied by a registration fee of



Boat building on Lake Lindeman.

two dollars, of the grant to.....(A. B.)
 of.....of the right to mine in
(insert description of claim)
 for one year from.....18....

"This certificate entitles the said.....
(B. C.) to all rights-and-privileges
 of the said.....(A. B.)
 in respect of the claim assigned, that is to say,
 the exclusive right of entry upon the said claim
 for the miner-like working thereof, and the con-
 struction of a residence thereon, and the ex-
 clusive right to all proceeds therefrom, for the
 remaining portion of the year for which said
 claim was granted to the said.....(A. B.)
 that is to say, until the.....18....

"The said.....(B. C.) shall
 be entitled to the use of so much of the water
 naturally flowing through or past his (or their)
 claim, and not already lawfully appropriated, as
 shall be necessary for the due working thereof,
 and to drain the claim free of charge.

"This grant does not convey to the said.....
(B. C.) any surface
 rights in said claim or any rights of ownership
 in the soil covered by the said claim, and the
 said grant shall lapse and be forfeited unless the
 claim is continually and in good faith worked by
 the said (B. C.) or his (or their) associates.

"The rights hereby granted are those laid
 down in the Dominion Mining Regulations, and
 are subject to all provisions of the said regula-
 tions, whether the same are expressed herein or
 not.

".....

"Gold Commissioner."

Application for Grant for Placer Mining Claim and Affidavit of Applicant.

"Form 'H.'"

"I, (or we) of.....hereby apply under the Dominion Mining Regulations for grant of a claim for placer mining as defined in the said regulations in..... (here describe locality) and I (or we) solemnly swear:

"First—That I (or we) am (or are) to the best of my (or our) knowledge and belief, the first discoverer (or discoverers) of the said deposit, or

"Second—That the said claim was previously granted to..... (here name the last grantee), but has remained unworked by the said grantee for not less than.....

"Third—That I (or we) am (or are) unaware that the land is other than vacant Dominion lands.

"Fourth—That I (or we) did on the..... day of..... mark out on the ground in accordance in every particular with the provisions of the mining regulations for the Yukon river and its tributaries, the claim for which I (or we) make this application, and that in so doing I (or we) did not encroach on any other claim or mining location previously laid out by any other person.

"Fifth—That the said claim contains as nearly as I (or we) could measure or estimate an area of..... square feet, and that the description (and sketch, if any) of this date hereto attached, signed by me (or us) set (or sets) forth in detail to the best of my (or our) knowledge and ability its position, form and dimensions.

"Sixth—That I (or we) make this application in good faith to acquire the claim for the sole purpose of mining, prosecuted by myself (or us) or by myself and associates, or by my (or our) assigns.

"Sworn before me

At.....thisday of
.....18....

"(Signature)"

Grant for Placer Claim.

"Form 'I.'

"Department of the Interior.

"Agency.....18....

"In consideration of the payment of the fee prescribed by clause 12 of the mining regulations of the Yukon river and its tributaries by(A. B.) accompanying his (or their) application No..... dated.....18.... for a mining claim in.....(here insert description of locality), the minister of the interior hereby grants to the said.....(A. B.) for the term of one year from the date hereof the exclusive right of entry upon the claim (here describe in detail the claim).

"Granted—For the miner-like working thereof and the construction of a residence thereon, and the exclusive right to all the proceeds derived therefrom. • That the said.....(A. B.) shall be entitled to the use of so much water naturally flowing through or past his (or their) claim and not already lawfully appropriated as shall be necessary for the due working thereof, and to drain his (or their) claim free of charge.

"This grant does not convey to the said.....
(A. B.) any surface right
 in the said claim or any right of ownership in
 the soil covered by the said claim, and the said
 grant shall lapse and be forfeited unless the
 claim is continuously and in good faith worked
 by the said(A. B.) or his
 (or their) associates.

"The rights hereby granted are those laid down
 in the aforesaid mining regulations and no more,
 and are subject to all the provisions of the said
 regulations, whether the same are expressed
 herein or not.

".....

"Gold Commissioner."

Amendments.

Amended regulations governing gold mining
 in the Klondyke appeared August 14, 1897, in
 the "Canadian Official Gazette." Entry can
 only be granted for alternate claims known as
 creek claims, bench claims, bar diggings, and
 dry diggings, and that the other alternate claims
 be reserved for the crown, to be disposed of by
 public auction or in such manner as may be
 decided by the Minister of the Interior.

Another order reads as follows:

"Whereas, Clause 7 of the regulations gov-
 erning the disposal of placer mines on the
 Yukon River and its tributaries in the North-
 west Territories, established by order in Coun-
 cil of May 21, 1897, provides that if any person
 shall discover a new mine and such discovery
 shall be established to the satisfaction of the

Gold Commission a claim for the bar diggings, 750 feet in length, may be granted: and, whereas, the intention was to grant a claim of 750 feet in length to the discoverer of the new mine upon a creek or river and not to grant a claim of that length for bar diggings, his Excellency by and with the advice of the Queen's Privy Council for Canada is pleased to order that Clause 7 shall be amended so that the above grant to a discoverer may apply to creek and river claims instead of to bar diggings."



Shooting the Rapids.

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..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
SEPTEMBER.							MARCH.							SEPTEMBER.						
..	..	..	1	2	3	4	..	1	2	3	4	5	..	..	..	1	2	3	..	..
5	6	7	8	9	10	11	6	7	8	9	10	11	12	4	5	6	7	8	9	10
12	13	14	15	16	17	18	13	14	15	16	17	18	19	11	12	13	14	15	16	17
19	20	21	22	23	24	25	20	21	22	23	24	25	26	18	19	20	21	22	23	24
26	27	28	29	30	..	..	27	28	29	30	31	..	..	25	26	27	28	29	30	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
OCTOBER.							APRIL.							OCTOBER.						
..	..	..	..	1	2	..	..	..	..	1	2	..	..	..	..	..	1	..	..	..
3	4	5	6	7	8	9	3	4	5	6	7	8	9	2	3	4	5	6	7	8
10	11	12	13	14	15	16	10	11	12	13	14	15	16	9	10	11	12	13	14	15
17	18	19	20	21	22	23	17	18	19	20	21	22	23	16	17	18	19	20	21	22
24	25	26	27	28	29	30	24	25	26	27	28	29	30	23	24	25	26	27	28	29
31	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..
NOVEMBER.							MAY.							NOVEMBER.						
..	1	2	3	4	5	6	1	2	3	4	5	6	7	..	1	2	3	4	5	..
7	8	9	10	11	12	13	8	9	10	11	12	13	14	6	7	8	9	10	11	12
14	15	16	17	18	19	20	15	16	17	18	19	20	21	13	14	15	16	17	18	19
21	22	23	24	25	26	27	22	23	24	25	26	27	28	20	21	22	23	24	25	26
28	29	30	..	..	..	..	29	30	31	..	..	..	..	27	28	29	30	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
DECEMBER.							JUNE.							DECEMBER.						
..	..	..	1	2	3	4	..	..	1	2	3	4	..	..	..	1	2	3	..	..
5	6	7	8	9	10	11	5	6	7	8	9	10	11	4	5	6	7	8	9	10
12	13	14	15	16	17	18	12	13	14	15	16	17	18	11	12	13	14	15	16	17
19	20	21	22	23	24	25	19	20	21	22	23	24	25	18	19	20	21	22	23	24
26	27	28	29	30	31	..	26	27	28	29	30	..	..	25	26	27	28	29	30	31
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

EXPENSES Month of _____ 18[illegible]

EXPENSES

Month of _____

18

[illegible]

EXPENSES

Month of _____

18

[illegible]

EXPENSES

Month of _____

18

[illegible]

EXPENSES

Month 03.

18

[illegible]

EXPENSES

Month of _____

18

[illegible]

RECEIPTS. Month of _____ 19____

[illegible]

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the paper. A vertical crease or fold line is visible near the left edge, suggesting it might be part of a notebook or binder. The lighting is even, and the paper appears slightly textured.

MEMORANDA

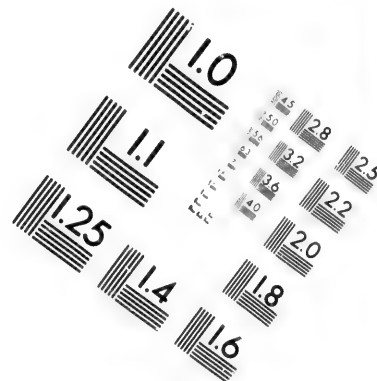
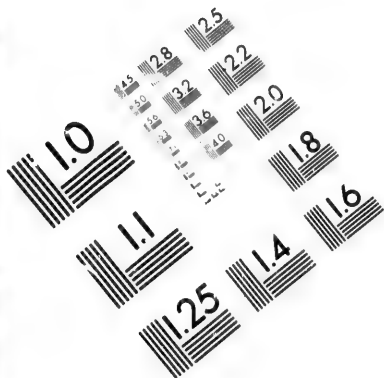
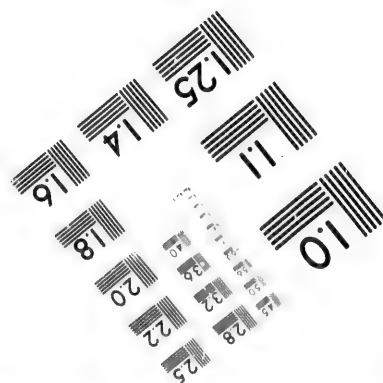
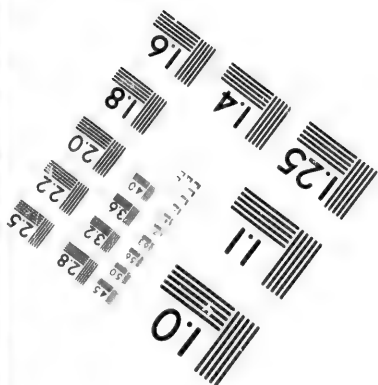
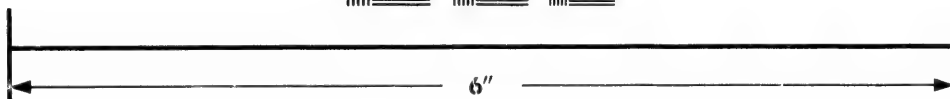
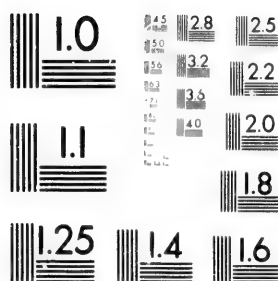
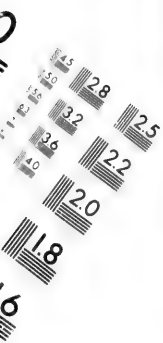


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic Sciences Corporation

**23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503**



This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the paper.

MEMORANDA

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the paper.

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MEMORANDA

MEMORANDA

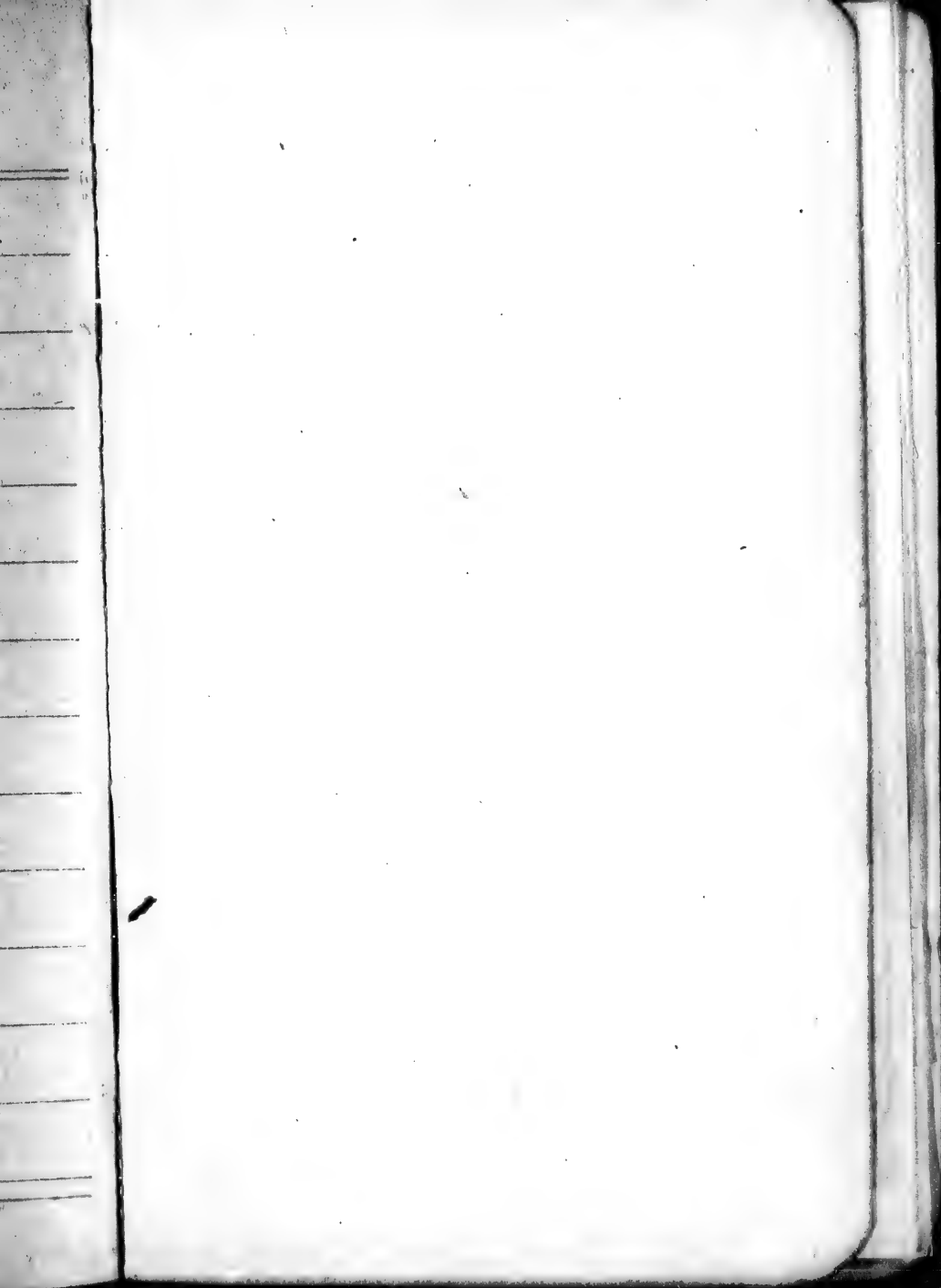
This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the paper.

MEMORANDA

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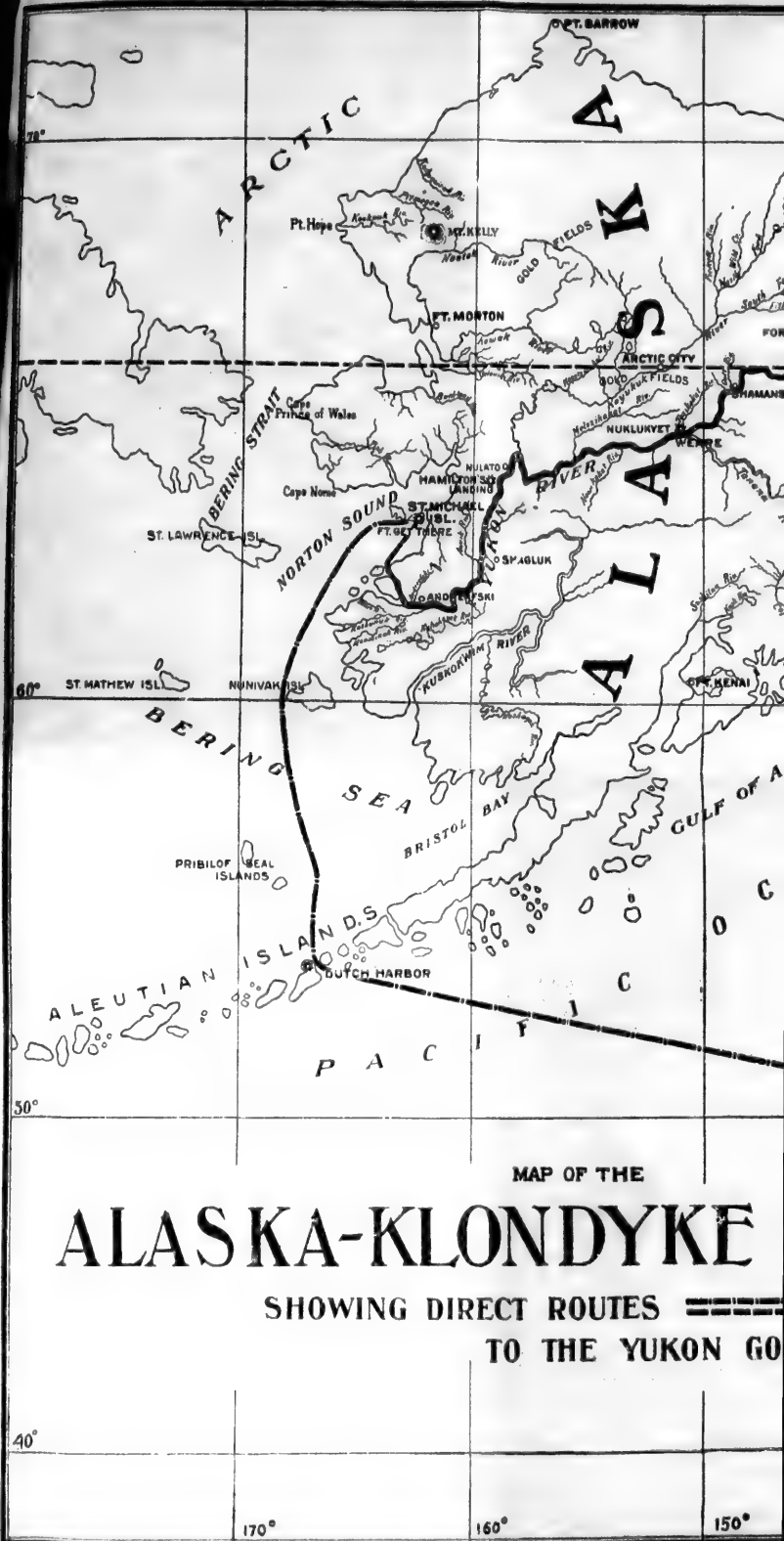
MEMORANDA

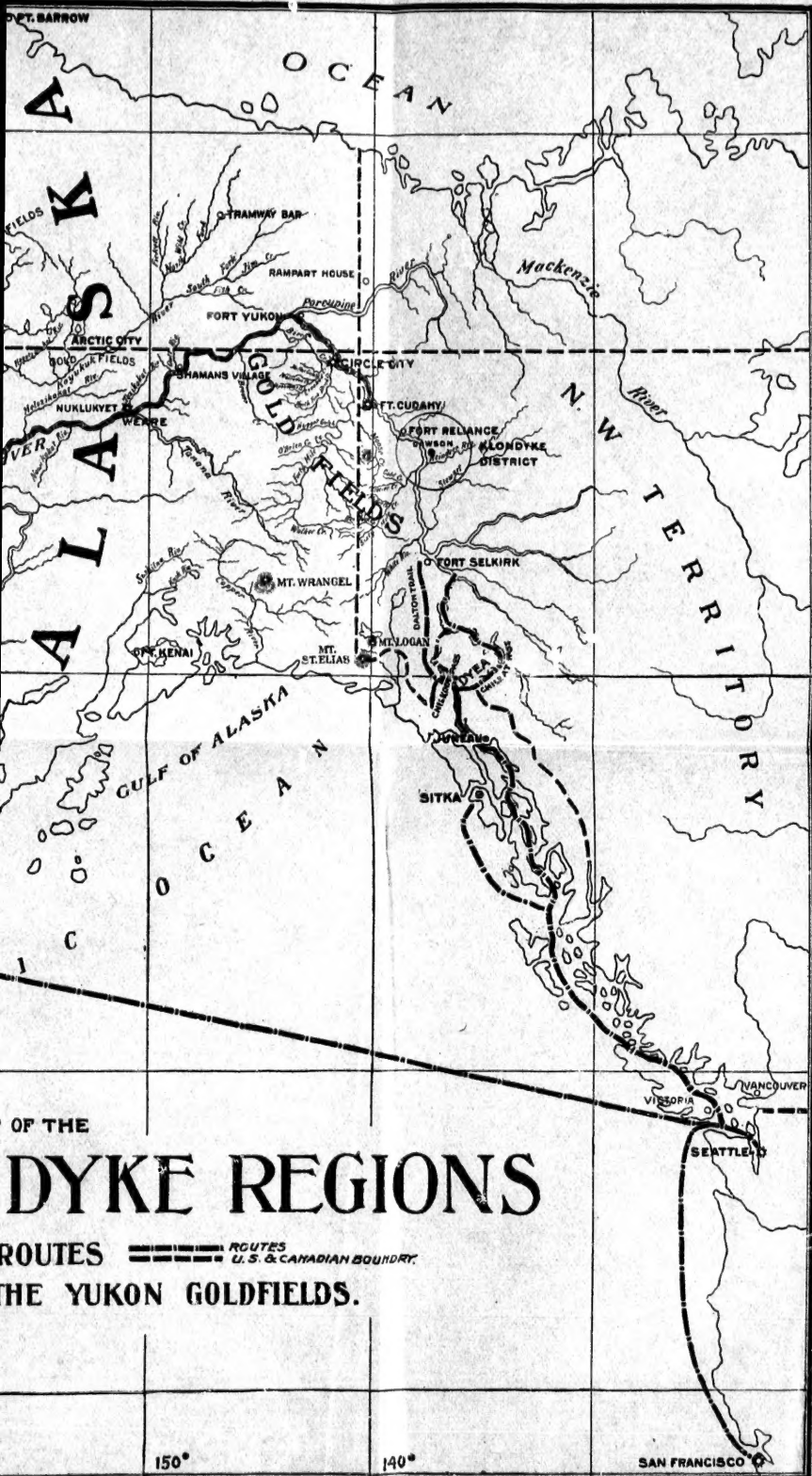
This image shows a blank, aged, cream-colored page, likely an endpaper or flyleaf of a book. The paper has a slightly textured appearance with some minor discoloration and a small dark spot near the center. There is also a faint, light-colored mark near the top right corner. The page is otherwise empty of any text or illustrations.





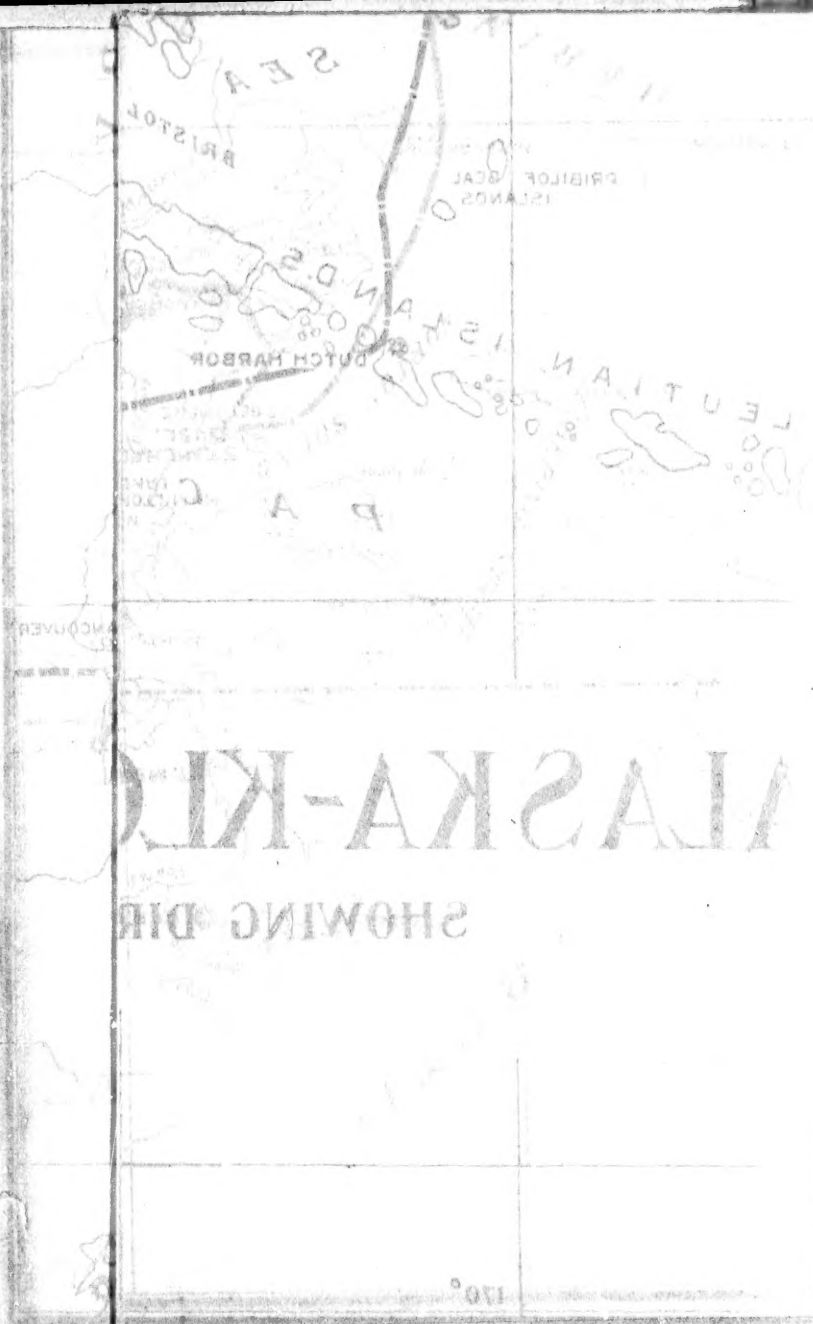
ONE





OF THE DYKE REGIONS

ROUTES   ROUTES
U.S. & CANADIAN BOUNDARY.
THE YUKON GOLDFIELDS.



SEA
BRISTOL

PRIBILOF ISLANDS

DUTCH HARBOR

LEUTIAN

P. A. C.

AMCOWAY

ALASKA-KL

SHOWING DIR

150°

HR

F5854.2

L59

1897

